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Prepared by the Bureau of Business Research
College of Business Administration

THE 1978 CENSUS OF AGRICULTURE

The twenty-first census of agriculture taken by the U.S. Department of Commerce, Bureau of the Census, in 1978 reveals a decline in the number of farms in Nebraska to 65,916, down from 67,597 in 1974 (Table 1, p. 2). The number of farms has steadily declined since 1945, when there were 111,756 farms (Figure 1, p. 3). The rate of decline has slowed in the 1970s, but continues. Data in Table 1 summarize the number of farms and selected characteristics in Nebraska for each census since 1945.

PAUL A. VOLCKER
AT UNIVERSITY OF NEBRASKA-LINCOLN
November 11, 1981

Mr. Paul A. Volcker, Chairman, Federal Reserve Board of Governors, will present the 1981 E. J. Faulkner Lecture at the University of Nebraska-Lincoln on November 11, 1981, at 10:30 a.m. Mr. Volcker's speech will be delivered in the Ballroom of the Student Union. Mr. Volcker occupies an extremely important and sensitive position guiding the country's monetary policy, and it is with great pleasure that the College of Business Administration hosts Mr. Volcker's visit. The lecture is open to the public and all are cordially invited.

The E. J. Faulkner Lecture series was endowed by Woodman Accident and Life Company to bring distinguished lecturers to the University. Mr. Faulkner is a recognized national leader in the life and health insurance business. He served for 40 years as President of Woodman Accident and Life Company and is currently Chairman of the Board. Under Mr. Faulkner's guidance, Woodman Accident and Life Company has grown to be one of the largest and most successful insurance companies headquartered in mid-America.

The lectures are conducted under the auspices of the Center for the Study of the American Business System in the College of Business Administration. The Center was established by the Board of Regents in January 1978 and is dedicated to improve education, research, and service related to the American business system. This lecture series provides a unique opportunity to supplement the formal education of our students and the community about American business, the challenges to our business system, and its prospects for the future. Other lecturers in the series include William E. Simon and Arnold W. Weber.

While the number of farms has declined steadily since 1945, acreage in farms has changed little since 1945. There was an actual increase—101,389 (0.2%)—in the number of acres in farms between census years 1974 and 1978. The trend toward more acreage in farms seems to coincide with the increase in grain prices in the early 1970s. In 1969 there were 45.8 million acres in farms and 46.2 in 1974. This slow trend toward more acreage in farms continued through 1978, although the rate of increase was below that recorded in the five-year interval 1969-74.

Data in this report are from the various censuses of agriculture. The first census of agriculture was taken in 1840 along with the sixth decennial census of the population. From 1840-1950, an agriculture census was taken as part of the decennial census of population. Mid-decade censuses of agriculture were conducted in 1925, 1935, and 1945. From 1954 through 1974, census was taken in the years ending in four and nine. This was changed by Congress in 1976 to adjust the agriculture census with other economic censuses. Economic censuses will be taken in 1978, 1982, and thereafter in five-year cycles.

One of the interesting aspects of the 1978 census is the sharply rising value of farm land. The value of the average Nebraska farm has increased substantially as farm size and the value of land have escalated over the past three decades. According to the 1978 census, the average-size farm in Nebraska was 702 acres. There has been a steadily increasing trend toward larger farms as the number of farms has declined and acres per farm increased (Figure 2, p. 3). The average farm was 427 acres in 1945, compared with 702 in 1978.

Farm land was valued at $525 per acre on average in 1978, up from $282 per acre in 1974. In 1945, farm land was valued at $36 per acre. It was still valued at less than $100 per acre in 1959 and by 1964 had increased to $109 per acre. Acreage prices began to increase at higher rates during the 1960s, as is well indicated by the data in Table 1 and Figure 3 (p. 3). During the last four years, 1974-78, farm land value increased at more than 16% compounded annually. The 16% compounded increase in agriculture land prices 1974-78 comes after a 13% compounded increase in the value of agriculture land over the interval 1969-74. Over the nine-year interval 1969-78, census of agriculture data indicate that Nebraska land prices increased from $154 per acre in 1969 to $525 per acre in 1978, an increase of approximately 240% or a compounded rate of 14.6%. By way of comparison, farm land increased from $36 per acre in 1945 to $109 in 1964, an increase of more than 200% or a compounded rate of approximately 6%. The rate of increase in the price of farm land has more than doubled since the mid-1960s. Certainly farm land has increased more rapidly than all prices over this interval. Average total farm value increased from $15,205 in 1945 to $372,786 in 1978 (Figure 4, p. 3).

As the price of farm land per acre climbed higher and higher, production seems to have become

(continued on page 6)

Table 1

SELECTED CHARACTERISTICS FOR CENSUS OF AGRICULTURE

	1945	1950	1954	1959	1964	1969	1974	1978
Number of farms	111,756	107,183	100,846	90,475	80,163	72,257	67,597	65,916
Land in farms (millions of acres)	47.753	47.467	47.486	47.756	47.793	45.834	46.172	46.273
Average farm size (acres)	427	443	471	528	596	634	683	702
Average value per farm (dollars)	15,205	25,517	33,713	46,796	65,268	97,931	192,574	372,786
Average value per acre (dollars)	36	58	72	89	109	154	282	525

Source: *Census of Agriculture,* 1978, Table 1, p. 1.

Table 2

MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD

	1978			1974		
Value of Agricultural Products Sold	Percent of Total Sales	Number of Farms	Percent of Total Farms	Percent of Total Sales	Number of Farms	Percent of Total Farms
Over $100,000	66.1	10,324	15.7	53.8	7,042	10.4
Over $80,000	72.5	14,078	21.4	60.8	9,975	14.8
Over $60,000	80.2	19,799	30.0	69.8	14,838	22.0

Source: *Census of Agriculture,* 1978, Table 10, p. 6.

Table 3

SELECTED CROPS HARVESTED AND VALUE OF PRODUCTION
1974, 1978

	Acres		Value of Production (thousands of dollars)	
	1974	1978	1974	1978
Harvested Cropland	16,309,434	16,442,249	2,309,978	2,554,601
Corn for grain or seed	5,591,301 (34.3%)	6,681,884 (40.6%)	1,086,801 (47.0%)	1,454,182 (56.9%)
Sorghums for grain	1,765,336 (10.8%)	1,813,960 (11.0%)	158,436 (6.9%)	230,337 (9.0%)
Wheat	2,823,818 (17.3%)	2,418,869 (14.7%)	344,433 (14.9%)	202,511 (7.9%)
Other small grains			37,309 (1.6%)	23,723 (0.9%)
Soybeans	1,048,372 (6.4%)	1,212,733 (7.4%)	165,932 (7.2%)	233,973 (9.2%)
Hay	3,455,199 (21.2%)	3,393,736 (20.6%)	227,064 (9.8%)	210,665 (8.2%)
Beets		77,008 (0.5%)		
Other			(12.6%)	(7.9%)

Source: *Census of Agriculture,* 1978, Table 27, p. 18.

Figure 1

NUMBER OF FARMS

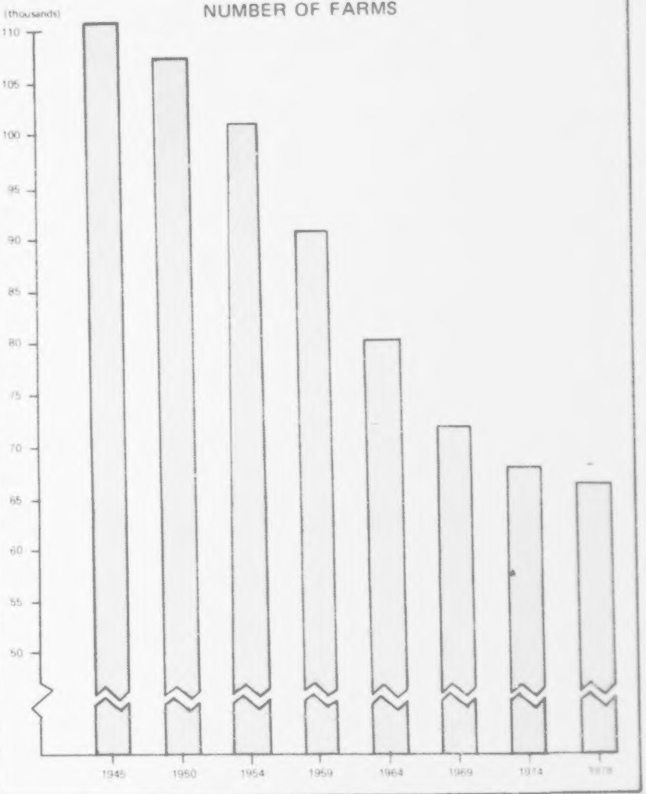


Figure 2

AVERAGE FARM SIZE

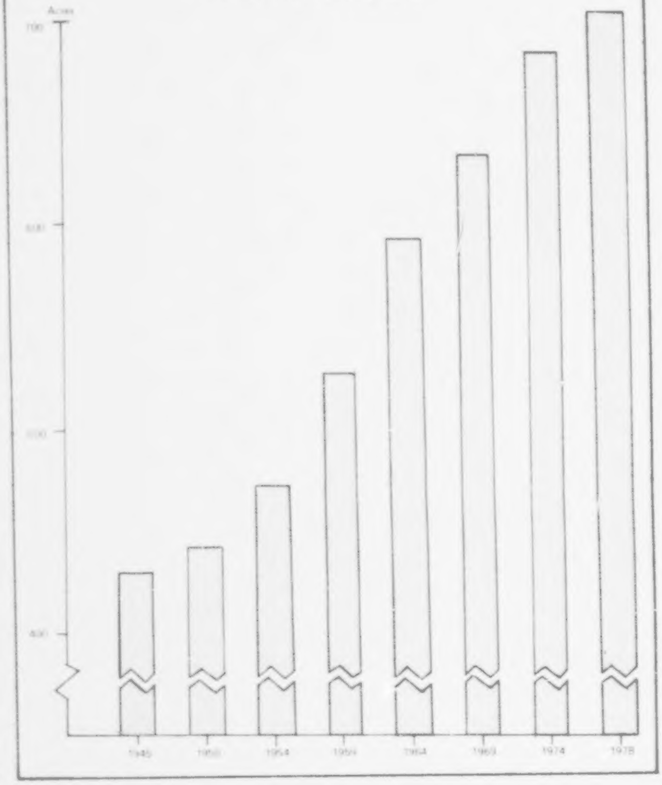


Figure 3

AVERAGE VALUE PER ACRE

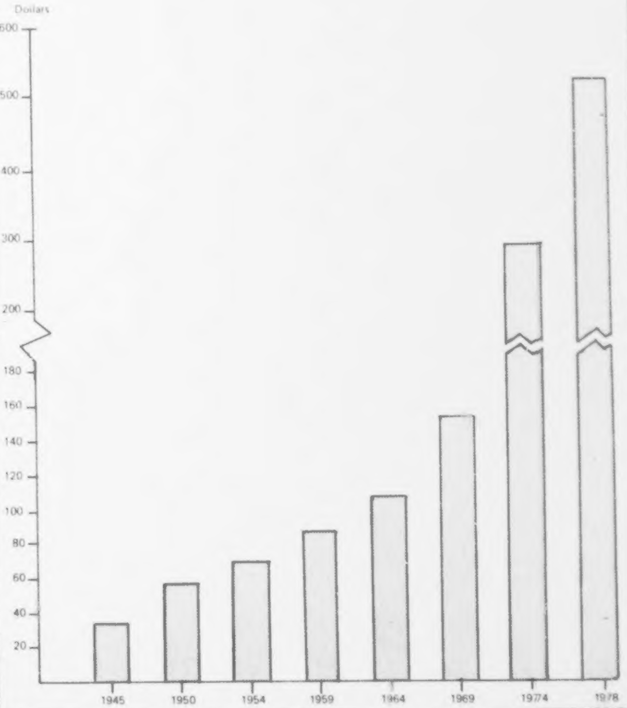
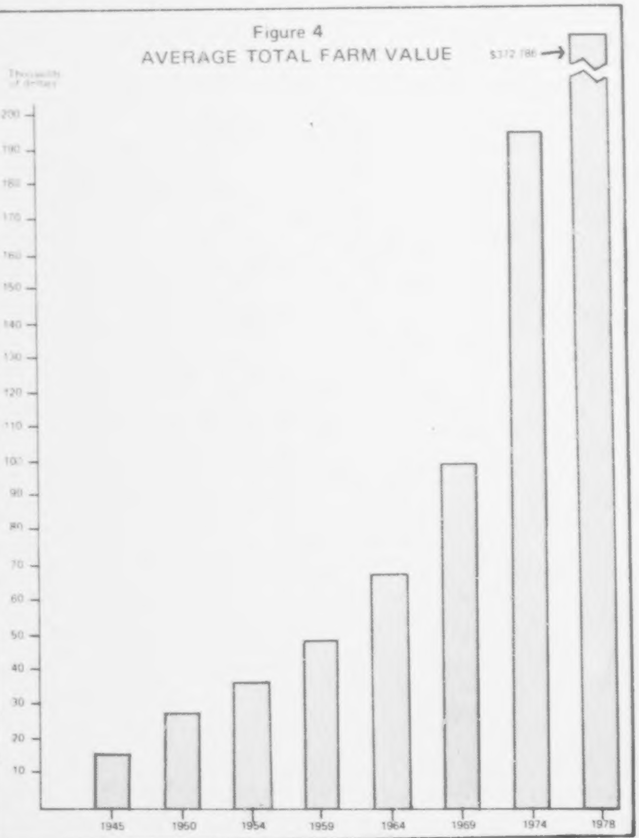


Figure 4

AVERAGE TOTAL FARM VALUE



Review and Outlook

A sharp increase in economic activity was recorded in the Nebraska economy in July. The state's physical volume index was 4.1% higher in July compared with the month-previous reading. It may be coincidence or it may be the development of changing seasonal patterns, but it is interesting to note that July 1980 was also a very good month for the Nebraska economy. The July 1981 improvement in the Bureau of Business Research's economic index was led by sharp gains in agriculture, manufacturing, and the distributive trades.

The index for agriculture increased 17.4% on a month-to-month basis. The increase in the agriculture index was a result of substantially higher cash farm marketings. On a seasonally adjusted basis, cash farm marketing receipts increased 23.2% June-July. Seasonally adjusted, cash farm marketings were $643 million—a record monthly marketing of Nebraska agricultural commodities. When July 1981 is compared with 1980, cash farm marketings in Nebraska were up 11.6% compared with 9.6% nationally. Prices received by Nebraska farmers were up 4.7% in July 1981 compared with one year previous, while prices received by U.S. farmers were up by 4.5%.

While the boost in the state's agriculture sector was undoubtedly responsible for much of the increase in the level of economic activity in July 1981, substantial contributions toward increased output were made by nonagriculture sectors of the Nebraska economy as well. Manufacturing

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade, transportation, communication and utilities; finance, insurance, and real estate, and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

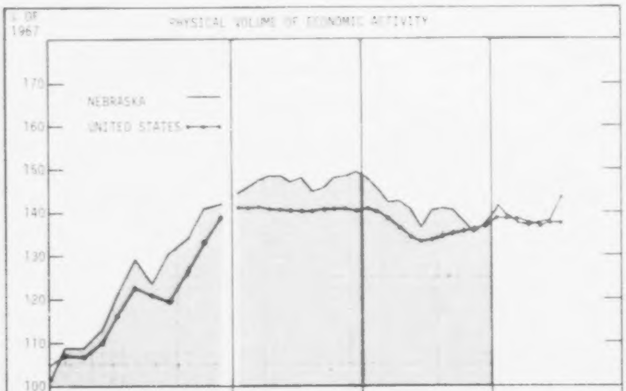
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

July 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	113.2	112.8	108.9	110.8
Agricultural	115.5	111.1	105.6	108.7
Nonagricultural	112.8	112.9	109.3	110.8
Construction	126.0	108.6	133.3	105.8
Manufacturing	116.2	116.6	108.8	110.3
Distributive	112.1	112.4	108.9	112.0
Government	108.1	109.1	105.8	108.8
Physical Volume	103.5	102.3	98.9	100.3
Agricultural	110.3	106.3	96.0	97.5
Nonagricultural	102.5	102.2	99.3	100.4
Construction	104.0	89.7	121.6	96.4
Manufacturing	107.1	106.5	98.9	99.7
Distributive	101.2	101.5	98.5	101.3
Government	101.0	99.3	98.9	99.7

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	381.0	358.0
Agricultural	379.7	383.9
Nonagricultural	381.0	357.1
Construction	261.8	313.0
Manufacturing	402.5	326.8
Distributive	393.4	383.7
Government	362.4	334.3
Physical Volume	143.6	137.5
Agricultural	142.8	151.2
Nonagricultural	143.7	137.1
Construction	70.2	83.9
Manufacturing	170.7	135.4
Distributive	143.4	139.8
Government	143.4	149.8

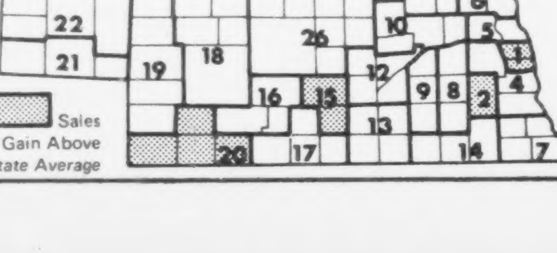


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	July 1981 as percent of July 1980	July 1981 as percent of July 1980	Year to date'81 as percent of Year to date'80
The State	93.2	93.3	100.2
1 Omaha	95.3	95.6	104.6
Bellevue	79.7		
2 Lincoln	89.2	90.4	101.3
3 So. Sioux City	101.6	97.2	98.2
4 Nebraska City	88.1	89.0	96.4
5 Fremont	87.3	86.1	98.5
Blair	87.5		
6 West Point	88.9	88.9	93.3
7 Falls City	89.2	87.8	95.7
8 Seward	86.0	85.8	97.2
9 York	92.5	89.4	93.5
10 Columbus	87.5	91.9	98.4
11 Norfolk	93.2	95.7	100.4
Wayne	99.3		
12 Grand Island	83.2	82.1	98.5
13 Hastings	91.6	92.4	98.5
14 Beatrice	95.0	92.3	97.7
Fairbury	83.2		
15 Kearney	91.6	92.7	100.8
16 Lexington	100.4	98.0	95.3
17 Holdrege	83.3	88.0	97.7
18 North Platte	92.5	92.0	95.3
19 Ogallala	93.3	96.5	99.0
20 McCook	91.2	90.9	102.2
21 Sidney	90.0	92.0	98.8
Kimball	89.0		
22 Scottsbluff/Gering	88.9	90.7	98.7
23 Alliance	89.5	92.4	98.5
Chadron	80.5		
24 O'Neill	103.2	93.5	98.3
25 Hartington	111.7	103.6	96.1
26 Broken Bow	122.6	102.3	95.0

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4) recorded a 2% increase in physical volume of output on a month-to-month basis. The physical volume index of manufacturing output is up 7.1% above year-previous levels, but still below July 1979 by approximately 1%. Output in the manufacturing sector has increased more or less month after month after reaching a low in July of 1980. The July 1981 index was about 3% below the February 1980 peak.

While output in the manufacturing sector increased, output from the construction sector declined nearly 17%. The Bureau of Business Research's index of economic activity in the construction sector stood at 70.2 (1967 = 100), down sharply from the June reading. The construction index was up slightly from July 1980's levels, but well below readings recorded earlier in 1981. The impact of continued high interest rates is adversely impacting the construction industry across the state.

Output in the distributive trade sector increased 4.3% over the June-July 1981 interval. The index stood at 143.4, up from a reading of 141.7 in 1980 but below the reading of 148.0 in July 1979. Like many other sectors of the state's economy, the distributive trade sector has recovered from the 1980 recession lows but is still below peak levels.

Activity in the government sector declined by 0.7% on a month-to-month basis. This index has changed little over the past thirty-six months—a point well illustrated by the July readings for the past three years. The index stood at 143.4 in July 1981, 142.0 in July 1980, and 143.6 in July 1979.

Dollar volume net taxable retail sales increased 1.6% July 1980-81. When adjustments are made for price increases, retail sales were down 6.7%. These adjustments were made using the commodity component of the Consumer Price Index. This index was up 8.9% on a year-to-year basis and, while it is considered the most reliable measure of net changes in net taxable retail sales, it has most of the defects inherent in the Consumer Price Index.

Motor vehicle sales were somewhat "stronger" than nonmotor vehicle sales. Motor vehicle sales were up 2.3% on an unadjusted basis, or a decrease of 6.1% in real terms. Nonmotor vehicle retail sales were up 1.6% on an unadjusted basis, or 6.7% when adjusted for prices. Total retail sales in July 1981 were estimated at $798 million.

Nebraska cities recording increases in real retail sales (Table 3) included Broken Bow, up 22.6%; Hartington, up 11.7%; O'Neill, up 3.2%; South Sioux City, up 1.6%; and Lexington, up 0.4%. For the state, real retail sales were 93.2% in July 1981 of July 1980 sales. Nebraska communities recording above-average retail sales in July 1981 compared with year-previous results include Omaha, Wayne, Beatrice, and Ogallala.

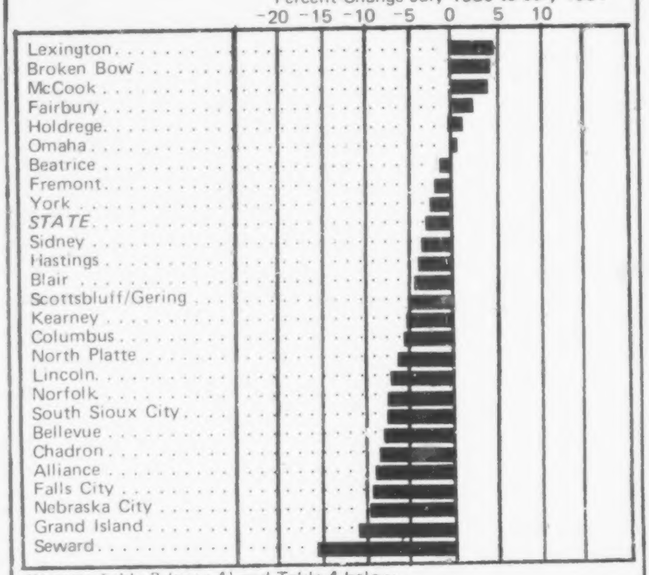
D. E. P.

5. PRICE INDEXES

July 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	274.4	110.7	110.5
Commodity component	255.0	108.9	109.4
Wholesale Prices	296.0	109.5	109.8
Agricultural Prices			
United States	254.0	104.5	111.5
Nebraska	266.0	104.7	110.0

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change July 1980 to July 1981



Source: Table 3 (page 4) and Table 4 below.

4. JULY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	102.7	70.3	100.0
Alliance	98.4	54.1	103.1
Beatrice	100.9	104.6	102.0
Bellevue	106.3	71.0	102.6
Blair	102.7	100.2	83.7
Broken Bow	102.2	25.7	91.0
Chadron	105.0	72.5	112.4
Columbus	103.8	73.1	96.2
Fairbury	102.5	587.7	87.7
Falls City	103.3	31.5	94.7
Fremont	107.0	107.4	94.5*
Grand Island	101.8	40.4	112.5
Hastings	101.0	87.6	99.1
Holdrege	103.3	434.1	127.9
Kearney	103.2	56.0	107.6
Lexington	103.8	189.4	98.4
Lincoln	100.0	73.1	100.4
McCook	102.9	401.5	103.0
Nebraska City	101.0	36.1	91.8
Norfolk	101.2	37.2	100.3
North Platte	100.5	59.0	92.3
Omaha	106.3	95.2	98.2
Scottsbluff/Gering	104.3	66.8	102.9
Seward	94.5	25.3	95.0
Sidney	101.6	95.7	111.6
So. Sioux City	96.4	26.7	103.1
York	102.2	82.5	93.8

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 1) slightly more concentrated. One sixth—or 10,324—of Nebraska's farms accounted for two-thirds of the value of all agriculture products sold in 1978. These 10,324 farms had sales in excess of $100,000 in 1978 (Table 2, p. 2). Thirty percent, or less than one-third of Nebraska's farms—19,799—accounted for slightly more than 80% of all agricultural products sold in 1978. These farms had sales in excess of $60,000 or more per farm. In 1974, 30% of all Nebraska farms marketed approximately 77% of all agriculture products sold. Data from the 1978 and 1974 censuses imply that marketing of agricultural products is more concentrated today than it was a few years ago.

There has been some shift in the composition of crops planted in Nebraska and the value of this production between the two census years 1974 and 1978 (Figure 5). Acreage of corn planted increased to 40.6% of all cropland, up from 34.3% in 1974. Soybeans recorded an increase in acres harvested of approximately 200,000, and accounted for 7.4% of total harvested cropland in 1978. Sorghum recorded a slight increase in harvested acres over the interval 1974-78. Wheat and hay declined in terms of acres harvested. Wheat accounted for 14.7% of all harvested cropland in 1978, compared with 17.3% in 1974. A slight decline was also recorded for hay (Table 3, p. 2).

The value of crops harvested reflects this composition in acreage change. Corn was responsible for more than half of the value of all crops harvested in Nebraska in 1978. Corn accounted for 56.9%, or approximately 1.4 billion dollars in terms of value of production in 1978. By contrast, corn accounted for 47% of the value of production of cropland in 1974. Soybeans and sorghum were up in terms of the proportion of the value of production accounted for by these crops.

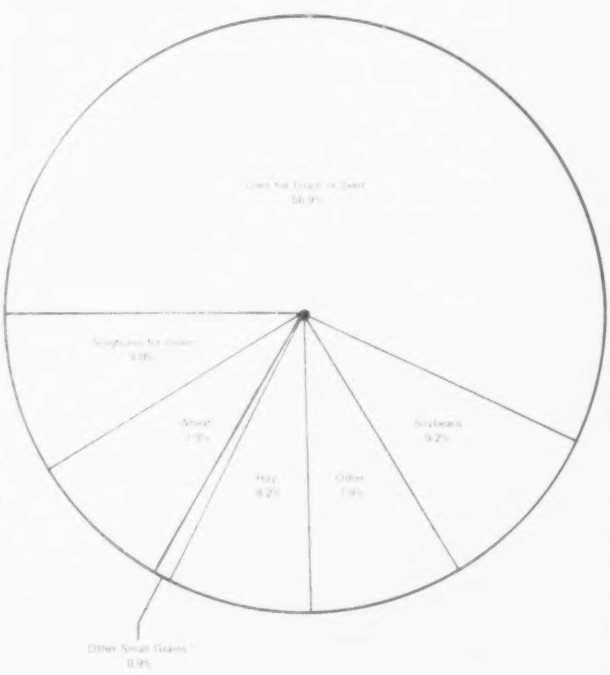
Wheat and hay declined, with the drop in the value of wheat being notably steep. Wheat accounted for 7.9% of the value of all crops harvested in 1978, compared with 14.9% in 1974. The value of wheat produced in Nebraska was placed at $202,000,000 in 1978, down from $344,000,000 in 1974. Corn and soybeans have gained in terms of value in acres harvested at the expense of primarily wheat.

D. E. P.

Figure 5

VALUE OF CROP PRODUCTION, 1978

(Percentage Distribution)



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College of Business Administration

DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS OF NORTH CENTRAL NEBRASKA

This article focuses on the demographic and economic characteristics of the North Central Region. The boundaries of these regions come from a modified version of the district/region system of Nebraska adopted by the Nebraska Department of Economic Development. To develop a pattern of change during the past decade, statistics on population, personal income, and retail sales will be examined in a fashion similar to the previous report on the Northwest Region (*Business in Nebraska,* September 1981).

The North Central Region of Nebraska is comprised of fourteen counties: Blaine, Boyd, Brown, Cherry, Custer, Garfield, Greeley, Holt, Keya Paha, Loup, Rock, Sherman, Valley, and Wheeler (Figure 1). The geographical contrasts of the region are as varied as the state of Nebraska, whose configuration the region mirrors. The unique physical traits of the North Central Region are reflected in terms of its demographic and economic characteristics. These characteristics will be highlighted in this article.

POPULATION

During the decade of the 1970s, eight out of the fourteen counties (57 percent) in the North Central Region experienced declines in population. This trend closely followed that of the state, as fifty-one counties in Nebraska (55 percent) experienced a net loss of people during this ten-year period (Table 1). Counties in the region showing a population increase were Blaine, Brown, Holt, Loup, Rock, and Wheeler. Only two counties increased at a higher rate than the statewide average of 5.7 percent: Brown, 8.9 percent; and Rock, 6.8 percent. Of the counties registering decreases in population, Greeley had a 13.5 percent decline; Boyd, 11.5 percent; and Sherman, 10.5 percent. For the region as a whole, the North Central counties decreased during the 1970s from 64,886 to 64,049 inhabitants for a 1.3 percent loss in population, as compared to the statewide increase of 5.7 percent and the 3.5 percent increase in the Northwest Region.

In the last decade the North Central Region boasts the third fastest growing incorporated place classified as a city. The city of Long Pine in Brown County grew from 363 to 524 inhabitants for a 43.5 percent increase in population. Long Pine also had the highest growth rate of housing units among all cities in the state as it went from 142 to 272 units for a 91.5 percent increase in the 1970s. This enabled Brown County to be the only county in the entire region to have an increase in housing units greater than that of the state as a whole. Housing units in Brown County increased 22.7 percent compared to the statewide increase of 21.2 percent. The North Central Region housing units increase of 8.8 percent was far below the state increase, and trailed the 12.7 percent increase of housing units in the Northwest Region. On the other hand, the number of persons per household in the North Central Region closely resembled the statewide average. The region had 2.68 persons per household in 1980 compared to the statewide average of 2.66.

(continued on page 2)

Figure 1
NORTH CENTRAL REGION OF NEBRASKA

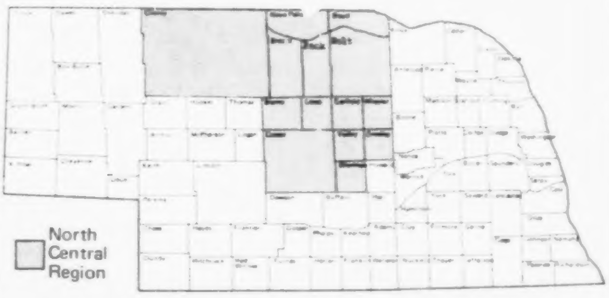


Table 1
1970 AND 1980 POPULATION OF COUNTIES AND SELECTED CITIES WITH THE PERCENT CHANGE IN THE NORTH CENTRAL REGION OF NEBRASKA

	Population		1970 to 1980
Counties	1970	1980	% Change
Blaine	847	867	2.4
Boyd	3,752	3,331	-11.2
Brown	4,021	4,377	8.9
Cherry	6,846	6,758	-1.3
Custer	14,092	13,877	-1.5
Garfield	2,411	2,363	-2.0
Greeley	4,000	3,462	-13.5
Holt	12,933	13,552	4.8
Keya Paha	1,340	1,301	-2.9
Loup	854	859	0.6
Rock	2,231	2,383	6.8
Sherman	4,725	4,226	-10.6
Valley	5,783	5,633	-2.6
Wheeler	1,051	1,060	0.9
Regional Total	64,886	64,049	-1.3
Cities			
Ainsworth	2,073	2,256	8.8
Broken Bow	3,734	3,979	6.6
Loup City	1,456	1,368	-6.0
O'Neill	3,753	4,049	7.9
Ord	2,439	2,658	9.0
Valentine	2,662	2,829	6.3

Source: 1980 Census of Population and Housing.

(continued from page 1)

The most recent Bureau of Business Research projections of population for the North Central Region indicate a decline of approximately 0.6 percent during the 1980s. This decrease is the smallest projected growth in population in the state (see *Business in Nebraska,* November 1978). It must be noted, however, that while regional population decreased every year from 1970 through 1978, the trend markedly reversed itself in 1979 and again in 1980. This turnaround in the population trend belies the 1.3 percent regional decrease for the past decade and may be an important indicator of population growth for the 1980s.

PERSONAL INCOME

Personal income is composed of wages and salaries, proprietors' income, other labor income, dividends, interest, rent, and transfer payments, and covers the time period from 1972 through 1979. Total personal income for the North Central Region of Nebraska increased from $247.7 million in 1972 to $465.0 million in 1979, an 88 percent increase (Table 2). This was smaller than the statewide increase of 97 percent due to both the farm and nonfarm components of personal income trailing the Nebraska levels. North Central personal income shows how the trend of total personal income for the region followed that of farming for the period. The average annual increase in personal income for the North Central Region, as well as for the state and the Northwest Region, was 10 percent for the period.

It is clear that the North Central Region is affected by national economic trends. The 1973 period marks a boom year; the region registered a 32 percent increase in personal income. The 1974-75 recession which followed, however, had a severe impact. Personal income for the region did not surpass the 1973 level (in current dollars) until 1978, taking five years to recover. Holt County was first to recover, but it took three years to do so. Two counties did not regain their 1973 levels until 1979, and Loup County had failed to recover from the recessionary effects by 1979. If the data were adjusted for inflation to 1972 dollars, the negative impact of the national economic decline on the personal income for the North Central Region would have been even more dramatic.

Nonfarm participation income measures wages and salaries, proprietors' income, and other labor income (fringe benefits, and the like). It is used as a measure of the earnings of all individuals that are producing the goods and services of a region. Real nonfarm earnings are expressed in 1972 dollars to adjust for inflation, resulting in an indication of the regional trend in output and production. Real nonfarm income for the North Central Region increased 24.4 percent from 1972 through 1979, slightly less than the statewide increase of 25.4 percent. Figures 2 and 3 illustrate

Figure 2
NONFARM PARTICIPATION INCOME
FOR THE NORTH CENTRAL REGION OF NEBRASKA
(in 1972 dollars)

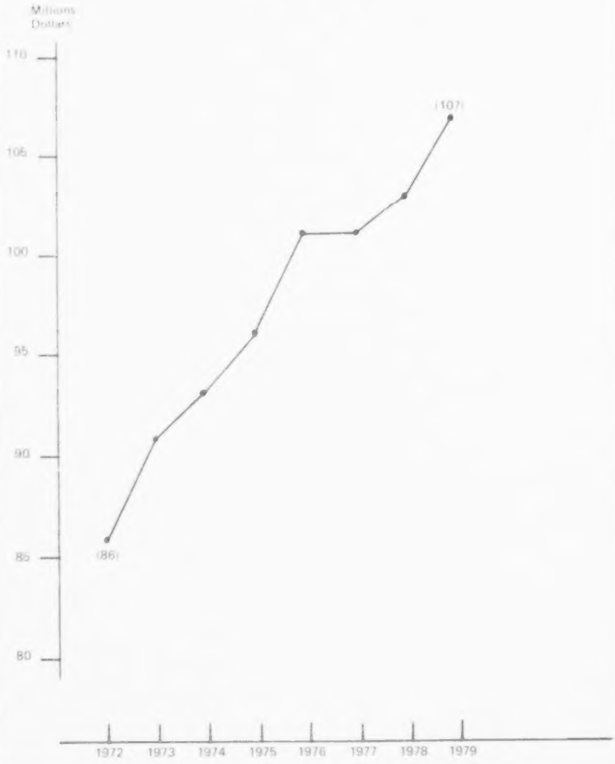


Table 2
PERSONAL INCOME FOR COUNTIES OF THE NORTH CENTRAL REGION OF NEBRASKA
(in thousands of current dollars)

	1972	1973	1974	1975	1976	1977	1978	1979	Percent Change
Blaine	2,825	4,876	3,170	3,474	2,871	3,253	4,024	5,376	90
Boyd	13,565	17,128	13,902	13,154	14,221	16,135	20,974	23,801	75
Brown	16,191	19,896	18,557	20,060	21,761	24,012	29,058	31.627	95
Cherry	32,383	40,009	30,354	28,298	30,373	33,218	46,094	58,201	80
Custer	58,029	76,356	63,485	66,633	66,363	76,092	84,576	100,277	73
Garfield	9,272	11,680	10,615	10,542	11,119	12,283	14,902	17,361	87
Greeley	14,354	18,956	14,289	15,705	15,102	18,236	22,692	26,247	83
Holt	42,586	61,048	47,946	53,203	64,252	63,120	80,979	93,940	121
Keya Paha	4,735	6,629	3,916	2,870	3,160	4,878	6,196	6,718	42
Loup	3,062	3,677	3,084	2,317	2,319	1,879	2,824	3,459	13
Rock	7,657	9,834	9,303	9,444	9,503	15,920	18,840	15,243	99
Sherman	17,216	21,286	18,477	17,477	21,111	23,249	27,280	31,926	85
Valley	22,227	28,371	23,220	28,989	28,158	30,787	38,908	42,915	93
Wheeler	3,634	6,286	4,189	4,185	4,431	4,244	6,168	7,869	117
Regional Total	247,736	326,032	264,507	276,351	294,744	327,306	403,515	464,960	88

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

the growth trends of real nonfarm earnings for the North Central Region and the state, respectively. Their annual growth rates are 3 percent, as is the case for the Northwest Region.

Per capita personal income is total personal income divided by population. As noted in the initial article, the concept is strictly monetary, so its best use is as an evaluator of data for a long time span. In the North Central Region per capita personal income in constant dollars (1972) has increased from $3,838 in 1972 to $4,475 in 1979 for a 2.2 percent annual growth rate (Figure 4), compared to the state's annual growth rate of 2.3 percent. Figure 4 is an interesting study of the impact of the boom-bust cycle on the North Central Region. The boom period of 1972-1973 shot per capita personal income up to near the state average, but the recession that followed devastated the region. The classical peak and the bucket-shaped bottom indicate that the overall economy of the region responds greatly to national economic trends, particularly in light of the fact that the population of the region remained fairly constant from 1972 to 1977. The fluctuations in state per capita personal income correspond to the good years and the lean years in terms of farm income for the state, which signifies the influence of agriculture on the Nebraska economy. The bad years for the ranching factor of the North Central economy, however, may have had a dampening effect on the recovery of the region.

RETAIL SALES

Statistically, a high positive correlation exists between the relative wealth of a region and the level of retail sales. For example, if a region has a higher level of personal income than the surrounding regions, then this condition will be favorably reflected in the regional volume of retailing. Retail sales for the region have increased from $108.3 million in 1970 to $147.5 million in 1980 in constant 1972 dollars (Table 3, p. 6). The 36 percent increase represents a compound annual growth rate of 3.1 percent. This lagged considerably behind the 56 percent increase in the retail sales of the state of Nebraska from 1970 to 1980, an annual growth rate of 4.5 percent. Real per capita retail sales for the region increased slower than for the state, 40 percent to 47.4 percent, respectively (Table 4, p. 6). This trend continues to be seen in recent second quarter retail sales for the region. Net taxable retail sales for the second quarter of 1981 compared to the second quarter of 1980, as well as the year-to-date figures, show that the North Central Region continues to lag the state. However, the gap has greatly diminished.

Real per capita retail sales, retail sales divided by population, gives a perspective to the examination of individual trade centers as a measure of the drawing power on consumers located away from that center. The real net taxable retail sales were $12.6 million in Ainsworth and $22.6 million in Broken Bow. Even though Broken Bow had 80 percent more real net taxable retail sales than Ainsworth, real per capita retail sales

(continued on page 6)

Figure 3
NONFARM PARTICIPATION INCOME
FOR NEBRASKA
(in 1972 dollars)

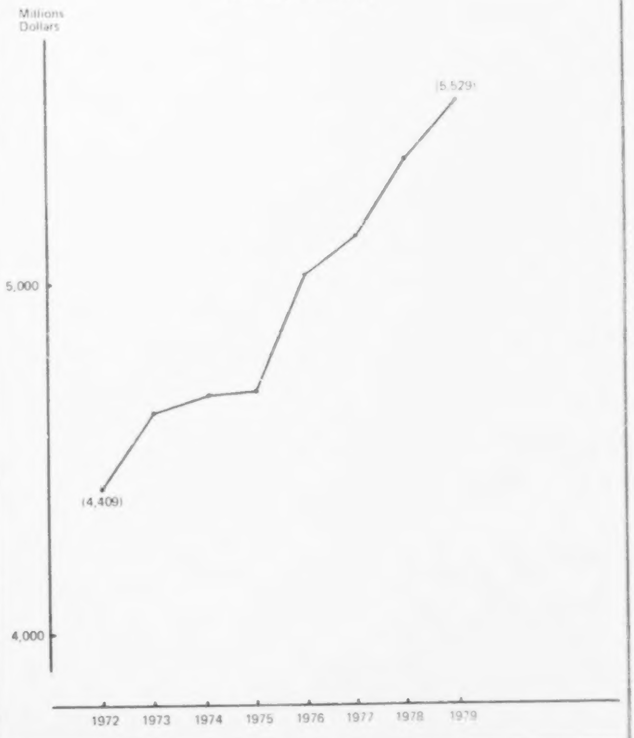
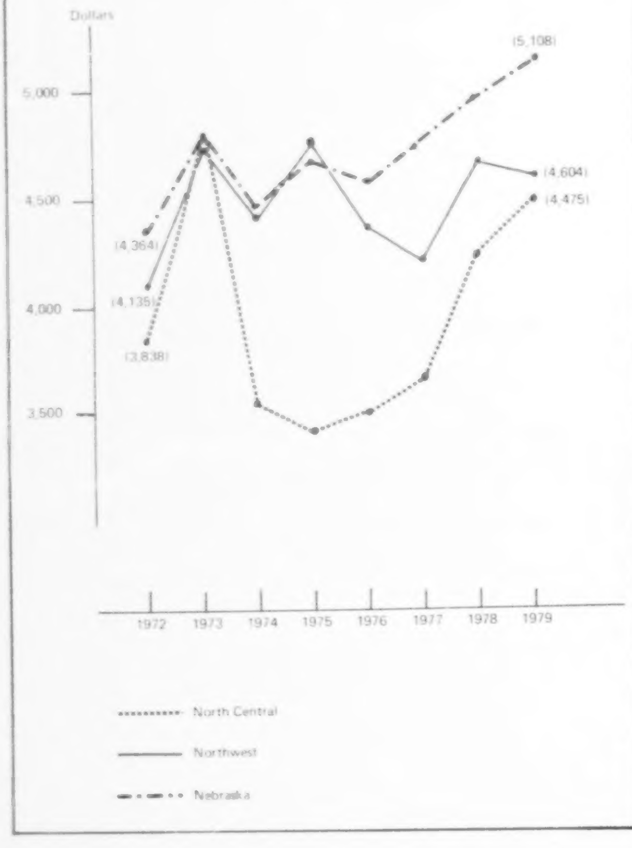


Figure 4
PER CAPITA PERSONAL INCOME
IN THE NORTH CENTRAL AND NORTHWEST REGIONS
OF NEBRASKA AND THE STATE
(in 1972 dollars)



Review and Outlook

Nebraska's output fell sharply in August 1981 compared with the previous month. The Bureau of Business Research's net physical volume index declined 2.4% on a month-to-month basis. A decline in output was registered across all sectors, with the exception of agriculture.

Nebraska cash farm marketing receipts of $650 million made August one of the highest months ever recorded. Prices received by Nebraska farmers were up 0.4% July-August, but when compared with one year ago were down 2.9%. Prices paid were up 7.9% August 1980-August 1981, indicating a continuing cost squeeze on the agriculture sector.

The decline in the Nebraska economy was more pronounced among the nonagriculture components. The index of output for all sectors excluding agriculture dropped 4.1% on a month-to-month basis. Construction recorded a 3.9% decrease in the index. The construction index stood at 78.6 in August 1981 (1967 = 100), compared with 71.4 August 1980 and 106.6 August 1979.

The August 1981 construction index value of 78.6 represents the lowest reading of 1981. After declining to 65.1 in June 1980, construction activity as measured by the index advanced each month, peaking in March 1981 at 102.7. Following the March peak, construction activity in Nebraska reversed directions and declined each month through the most current reading of the index, August. High interest rates would appear to be adversely impacting the construction sector.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

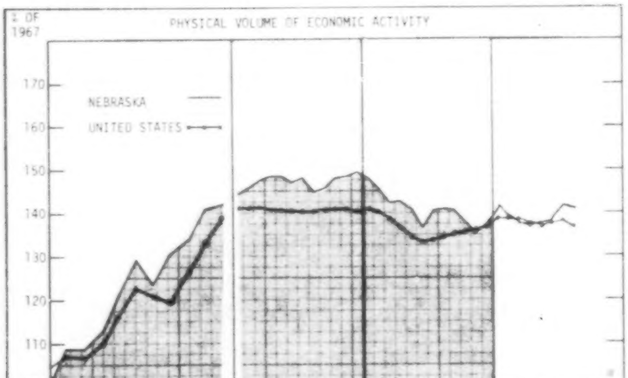
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

August 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	108.5	111.3	108.8	110.8
Agricultural	110.2	103.9	106.4	108.4
Nonagricultural	108.2	111.5	109.2	110.9
Construction	114.8	106.0	131.0	105.2
Manufacturing	108.0	114.0	108.6	110.8
Distributive	107.4	111.7	108.7	111.9
Government	110.7	107.8	106.5	108.7
Physical Volume	100.9	101.8	99.2	100.6
Agricultural	113.5	105.9	98.5	98.8
Nonagricultural	99.0	101.7	99.3	100.6
Construction	110.1	101.7	123.0	98.8
Manufacturing	101.1	105.0	99.0	100.4
Distributive	96.9	100.7	98.2	101.2
Government	103.2	98.9	99.5	99.6

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	373.5	358.1
Agricultural	413.5	348.2
Nonagricultural	367.3	358.5
Construction	251.6	307.6
Manufacturing	381.6	324.4
Distributive	377.8	387.7
Government	365.0	335.5
Physical Volume	140.5	137.4
Agricultural	154.9	136.6
Nonagricultural	138.2	137.4
Construction	78.6	96.1
Manufacturing	160.8	134.2
Distributive	136.7	140.2
Government	143.7	148.9

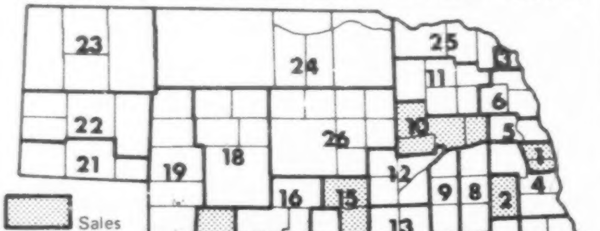


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	August 1981 as percent of August 1980	August 1981 as percent of August 1980	Year to date'81 as percent of Year to date'80
The State	101.0	99.8	100.1
1 Omaha	98.4	98.9	103.9
Bellevue	100.0		
2 Lincoln	100.5	99.6	101.0
3 So. Sioux City	90.4	94.3	97.6
4 Nebraska City	97.6	96.8	96.4
5 Fremont	93.0	89.1	97.2
Blair	95.8		
6 West Point	91.4	90.1	92.9
7 Falls City	92.1	98.1	96.0
8 Seward	96.0	83.6	95.3
9 York	92.9	85.6	92.4
10 Columbus	125.4	113.9	100.4
11 Norfolk	98.2	96.6	99.9
Wayne	94.4		
12 Grand Island	89.7	88.6	97.0
13 Hastings	98.0	96.9	98.2
14 Beatrice	92.2	93.0	97.1
Fairbury	94.4		
15 Kearney	99.2	96.9	100.2
16 Lexington	95.9	97.3	95.6
17 Holdrege	104.5	95.6	97.4
18 North Platte	90.2	90.5	94.7
19 Ogallala	92.2	98.2	98.9
20 McCook	95.4	93.3	101.0
21 Sidney	115.7	106.6	99.8
Kimball	104.2		
22 Scottsbluff/Gering	96.7	92.9	97.9
23 Alliance	103.0	97.9	98.4
Chadron	100.2		
24 O'Neill	99.1	95.7	98.0
25 Hartington	105.2	101.0	96.7
26 Broken Bow	105.5	93.3	94.8

*State totals include sales not allocated to cities or regions. The year-to year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

Manufacturing reported a decrease in the index of 4.8% on a month-to-month basis. The July-August decline represents one of the steepest declines on a month-to-month basis. Manufacturing output in August 1981 was about the same as in August 1980, but about 6% below the level recorded in August 1979. Manufacturing, like most sectors, is below peak levels recorded in 1979 or 1980.

The distributive trade component of the index declined 4.6%. This is the lowest reading for the distributive trade sector since June 1980, the trough of the sharp second-quarter 1980 decline.

Output in Nebraska's government sector declined 0.5% July-August 1981. This index stood at 148.9 in August 1981 compared with 150.6 in August 1980 and 149.2 in August 1979. Output as measured by the index has changed little in the government sector during the past three years.

Nebraska retail sales in August were $813 million, up from $753 million one year ago. August sales were approximately $15 million higher than July 1981, or about 1.8% above the July level (unadjusted for price changes).

Areas with above-average retail sales on a month-to-month basis include Columbus, up 17.7%; Lincoln, up 8.7%; Kearney, up 6.4%; Grand Island, up 4.7%; Hastings, up 3.6%; Holdrege, up 2.7%; and Nebraska City, up 3.9% (data refer to regions).

Cities with substantial increases in retail sales include Columbus, Holdrege, Sidney, Hartington, and Broken Bow. Columbus recorded a substantial increase in price-adjusted retail sales. The largest gains were scattered across the state, and there seems to be no particular geographic pattern associated with these gains.

When retail sales are adjusted for price changes using the commodity component of the Consumer Price Index—an imperfect price adjustor—twelve of the state's twenty-six economic regions showed declines. Regions which remain below 1980 year-to-date retail sales through August include Region 3, the South Sioux City area; Region 6, the West Point area; Region 7, the Falls City area; Region 9, the York area; Region 8, the Seward area; Region 13, the Hastings area; Region 16, the Lexington area; Region 17, the Holdrege area; Region 18, the North Platte area; Region 19, the Ogallala area; Region 24, the O'Neill area; Region 25, the Hartington area; and Region 26, the Broken Bow area. Retail sales are not depressed in communities in these areas and some communities have had a good month at times, but, on a cumulative basis, sales remain below 1980 levels.

The strongest regional retail sales markets on a cumulative basis through August include Omaha, Lincoln, Columbus, Kearney, and McCook. These areas had price-adjusted retail sales increases ranging from 3.9% in Omaha to .2% in Kearney. D. E. P.

5. PRICE INDEXES

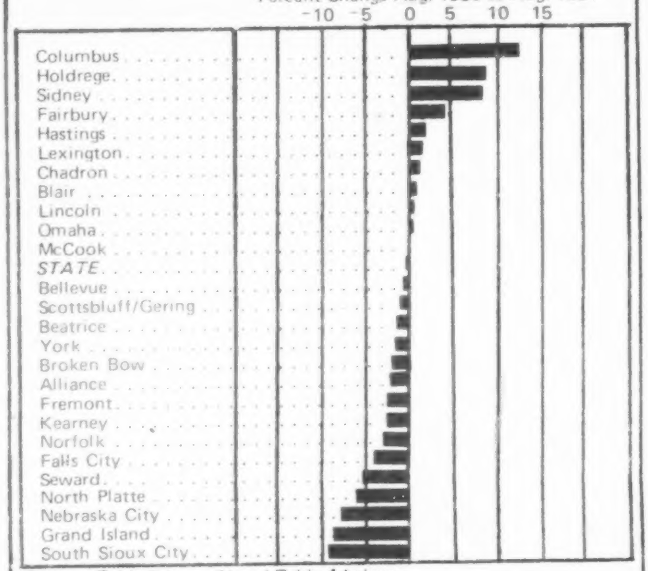
August 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	276.5	110.9	110.6
Commodity component	256.2	108.2	109.2
Wholesale Prices	296.2	108.2	109.6
Agricultural Prices			
United States	255.0	98.1	109.6
Nebraska	267.0	97.1	108.1

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change Aug. 1980 to Aug. 1981



Source: Table 3 (page 4) and Table 4 below.

4. AUGUST CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	102.2	72.5	94.2
Alliance	97.9	63.8	101.3
Beatrice	102.0	129.4	94.5
Bellevue	102.3	76.1	83.0
Blair	105.2	113.1	89.8
Broken Bow	102.0	35.5	98.1
Chadron	106.2	75.4	78.2
Columbus	103.9	85.7	89.1
Fairbury	102.4	339.7	98.9
Falls City	103.7	56.0	83.7
Fremont	102.6	92.0	83.8*
Grand Island	102.4	34.3	99.5
Hastings	102.8	134.3	99.2
Holdrege	103.3	294.3	109.4
Kearney	99.6	68.0	97.0
Lexington	103.6	144.6	106.2
Lincoln	102.2	85.2	92.4
McCook	102.1	124.8	93.3
Nebraska City	100.3	24.6	90.1
Norfolk	101.9	49.6	103.7
North Platte	100.6	60.1	93.1
Omaha	102.3	99.7	94.0
Scottsbluff/Gering	104.7	71.5	90.6
Seward	102.3	36.5	92.9
Sidney	101.2	114.2	100.2
So. Sioux City	97.0	45.2	95.9
York	104.4	96.2	88.9

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

in Ainsworth and Broken Bow were almost identical—$5,600 to $5,675, respectively. This is indicative of the smaller population in Ainsworth (2,256) compared to Broken Bow (3,979). It reflects the growth in business in Ainsworth, as its per capita retail sales increased 47 percent and real net taxable retail sales increased 59 percent in the 1970s. This is a result of the internal economic activity in Brown County, led by the increased population and housing in nearby Long Pine. It is interesting to note that two of the five cities reported as having had an increase in real retail city sales for July 1981 as a percent of July 1980 (out of the thirty-two cities reviewed) are in the North Central Region. Broken Bow recorded the largest increase of the Nebraska cities in the report, up 22.6 percent, while O'Neill was up 3.2 percent (see *Business in Nebraska*, November 1981).

In summary, the North Central Region appears to have been somewhat less affluent than the remainder of the state during the past decade. The North Central Region is still struggling to reach its 1973 level of per capita personal income in real dollars, while per capita personal income for the state as a whole has risen 6.3 percent above the 1973 peak. The positive advances for the North Central personal income from 1977 through 1979 must be tempered with the understanding that a national economic downturn could present problems for per capita personal income in the region. Although the North Central Region ranks last at the moment among the Nebraska regions in anticipated economic growth, the Bureau of Business Research projects that personal income and per capita personal income in the North Central Region are both expected to increase by 47.1 percent by the end of the century.

JOHN WINGENDER

Table 3
1970 AND 1980 NET TAXABLE RETAIL SALES*
FOR COUNTIES AND SELECTED CITIES OF THE
NORTH CENTRAL REGION OF NEBRASKA AND THE STATE
(in millions of dollars)

	Current Dollars		1972 Dollars	
Counties	1970	1980	1970	1980
Blaine	0.7	1.7	0.8	1.0
Boyd	4.3	8.7	4.6	4.9
Brown	7.9	23.7	8.5	13.2
Cherry	11.4	30.4	12.3	17.0
Custer	23.9	59.2	25.8	33.1
Garfield	3.9	10.6	4.2	5.9
Greeley	4.7	9.5	5.1	5.3
Holt	21.1	66.3	22.8	37.1
Keya Paha	0.8	1.8	0.9	1.0
Loup	0.4	0.8	0.4	0.4
Rock	4.0	12.9	4.3	7.2
Sherman	5.6	11.5	6.1	6.4
Valley	11.0	24.9	11.9	13.9
Wheeler	0.5	1.8	0.5	1.0
Regional Total	100.2	263.8	108.3	147.5
State	2,961.5	8,920.7	3,201.6**	4,986.4
Cities				
Ainsworth	7.3	22.6	7.9	12.6
Broken Bow	16.2	40.4	17.5	22.6
Loup City	4.7	9.5	5.1	5.3
O'Neill	13.5	42.6	14.6	23.8
Ord	9.5	21.5	10.3	12.0
Valentine	10.1	27.4	10.9	15.3

*Non-motor vehicle sales. **Recently adjusted state figure.
Source: Nebraska Department of Revenue.

Table 4
1970 AND 1980 PER CAPITA RETAIL SALES*
FOR THE STATE OF NEBRASKA,
THE NORTH CENTRAL REGION, AND SELECTED CITIES
(in 1972 dollars)

	1970	1980	% Change
State	2,155	3,176	47.4
North Central Region	1,669	2,303	40.0
Cities			
Ainsworth	3,807	5,600	47.1
Broken Bow	4,690	5,675	21.0
Loup City	3,490	3,882	11.2
O'Neill	3,889	5,881	51.2
Ord	4,211	4,521	7.4
Valentine	4,102	5,414	32.0

*Non-motor vehicle sales.
Source: Nebraska Department of Revenue,
1980 Census of Population and Housing.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

STRUCTURE AND EFFICIENCY OF NEBRASKA FARMS

Farm structure issues have been the subject of considerable debate in recent years. The debate has centered around the growing size of farm operations and the desirability of such growth. Those who oppose this growth express concern over the future of family farms and the continued viability of traditional rural institutions. Others argue that farm size has grown because efficiency requires it, and that any attempts to limit its growth is an infringement on the entrepreneurial spirit of our nation's farmers. It is not possible in this article to address all of the relevant issues surrounding this debate, nor is it a desire to present the various arguments for and against the growth in farm size. Instead, data from the 1978 Census of Agriculture concerning farm structure in Nebraska will be reviewed, along with the most recent U.S. Department of Agriculture (USDA) study on economies of size in field crop farming. Finally, the implications of this study for farm structure in general and, more specifically, for Nebraska farms will be explored.

FARM STRUCTURE IN NEBRASKA

The Census of Agriculture is a valuable source of information concerning the structure of farming. Not only are the size and numbers of farms given, but various organizational features such as the tenure of farm operators and the extent of corporate farming are also given. Table 1 (p. 1) summarizes information concerning farm structure in Nebraska from the most recent Census of Agriculture (1978) and selected census years dating back to 1945.

The fact that the number of farms has steadily declined since 1945 is a surprise to no one. Farm numbers in Nebraska have decreased from just under 112,000 in 1945 to slightly less than 66,000 in 1978. The average annual percentage decrease between 1974 and 1978, however, was less than in any of the previous census periods shown. Both the average annual percentage decrease and the absolute average annual decrease in the number of farms was the greatest during the period from 1954 to 1964.

Not too surprisingly, average farm size in Nebraska parallels closely the decline in farm numbers. Average farm size increased most rapidly during the period between 1954-64, and least rapidly in the most recent census period, 1974-78. During the 1954-64 period, average farm size grew at an average annual rate of 12.5 acres per year, compared to 4.7 acres per year during the 1974-78 period.

A breakdown of farms-by-size categories reveals some interesting trends which have occurred since 1945. The smallest size category of farms (1-99 acres) has actually increased as a percent of the total farms since 1964. This increase (an increase in both the percentage and absolute number of farms) has been attributed by many to a growing phenomenon called "hobby farming," that is, persons who work full time off the farm, but who commute from a rural acreage where a small amount of agricultural products are grown. Other size categories have reflected the trend toward larger farm size. As a share of total farms, the 100-179 acre category has steadily declined since 1945, the 180-259 acre category since 1954, and the 260-499 acre category since 1964. As one would expect, the largest size categories have all been increasing since 1945.

The value of land and buildings can be used as an indication of the barriers to entry in the farming industry. Although the average value of land and buildings in Table 1 is in nominal rather than real terms, there can be little doubt that the real value has increased dramatically since 1945. The average value of land and buildings was just over $15,000 in 1945. This compares to over $372,000 in 1978. Of course, some of this represents the increasing size of farms, but most is due to the rapid escalation of land prices. Regardless of its reasons, the increased value of land has become a major barrier to the entry of beginning farmers in the industry.

Tenure patterns of farm operators in Nebraska have shown significant changes since 1945. Full owners and part owners (those who both own and rent land they operate) as a percent of total farm operators have increased significantly since 1945. Tenants (those who only rent land or work on shares for others) as a percent of total farm operators have decreased from 47.9 percent in 1945 to 21.5 percent in 1978. An optimistic view of this trend is that for various reasons (credit availability, credit programs for beginning farmers, and the like), a higher percent of people who actually work the land also own at least part of the land they operate. Another view, however, is that the decline in the percent of tenants is an indication of increasing barriers to entry. Tenancy (at least in the northern states) has been a traditional way for families who do not own land to enter the farming business and gradually gain ownership. Perhaps as capital requirements have increased, the possibility of going from a tenant to at least a partial owner has decreased over the years, resulting in a relative decline in the number of people attempting tenancy. This is certainly speculative, though, and other explanations might well be given.

The 1978 Census of Agriculture has the most complete breakdown of farms by type of business organization of any of the previous censuses. The major area of clarification deals with the classification of corporations—family held and other than family held. The 1969 Census did not classify corporations in this manner, and although the 1974 Census

(continued on page 2)

(continued from page 1) used a similar classification, the accuracy of the data received is in question due to the manner in which the survey questions were asked.

The 1978 Census shows that individual or family farms are by far the most dominant legal form of business organization in Nebraska. Farms owned directly by individuals or families constitute just over 86 percent of all farms. Partnerships follow with almost 10 percent, and corporations with 3.6 percent. Most corporations are family held, with nonfamily corporations representing only 0.3 percent of all farms in Nebraska.

This information concerning the legal form of business organization, however, is not as conclusive as it might seem. Legal form of business organization as used in the census refers to that of the operator, not to that of the land owner. For example, under the census classification a person who only rents land would be classified into one of the three categories: individual or family, partnership, or corporation. At the same time, the land which is rented to the tenant may be owned by an individual or family, partnership, or corporation. In essence, the business organization of the entities which own land is left unclear.

ECONOMIES OF SIZE IN FIELD CROP FARMING

The USDA has just finished the most complete study of economies of size in field crop farming.[1] Economies of size studies attempt to determine the average costs of production as the size of the farm is varied. Economies of size are important because they have implications for the structure of farming (the size and number of farms). If relatively large farms can produce a bushel of corn considerably cheaper than smaller farms, then that fact may be responsible for the increasing size of Nebraska farms. If, on the other hand, smaller farms can produce nearly as cheaply as larger farms on a per-unit basis, then reasons for the growth in the size of farms must be found elsewhere. The USDA study just mentioned sheds considerable light on this subject.

The USDA studied seven different types of farms which were characteristic of seven different regions of the United States. The corn belt type was most typical of field crop farms in Nebraska. A typical corn belt farm in the study was one which produced a mix of corn, soybeans, winter wheat, and oats. The primary source of data was a 1978 cost of production survey conducted by the USDA. Standard cropping and management practices were identified, and a least-cost combination of inputs was found for various sizes of farms. This information was then combined to produce a long-run average cost curve (LRAC). The LRAC shows the average cost per unit of output as the size of the farm is varied.

Table 1
NEBRASKA FARM STRUCTURE

	1978	1974	1964	1954	1945
Number of Farms	65,916	67,597	80,163	100,733	111,756
Average Size of Farms (acres)	702	683	596	471	427
Value of Land and Buildings	$372,786	$192,574	$65,268	$33,713	$15,205
Percent of Farms by Size					
1-99 (acres)	19.7	16.2	13.5	14.7	15.8
100-179	12.6	14.0	15.8	22.2	25.3
180-259	9.2	10.3	14.1	18.2	17.6
260-499	24.6	26.8	30.6	26.8	25.1
500-999	18.8	18.6	15.2	10.6	9.7
1000 or more				7.5	6.5
1000 to 1999	9.2	8.5	6.5		
2000 or more	5.9	5.6	4.3		
Number of Farms (%) by Tenure of Operator					
Full owners	26,744 (40.6)	28,674 (42.4)	28,629 (35.7)	35,141 (34.9)	33,622 (30.1)
Part owners	24,971 (37.9)	25,084 (37.1)	26,663 (33.3)	26,342 (26.2)	24,603 (22.0)
Tenants	14,201 (21.5)	13,839 (20.5)	24,871 (31.0)	39,250 (38.9)	53,531 (47.9)
Number of Farms (%) by Business Organization of Farm					
Individual or Family	56,872 (86.3)	NA	NA	NA	NA
Partnerships	6,460 (9.8)	NA	NA	NA	NA
Corporations	2,394 (3.6)	NA	NA	NA	NA
Family held	2,189 (3.3)	NA	NA	NA	NA
Other than family held	205 (0.3)	NA	NA	NA	NA
Other	190 (0.3)	NA	NA	NA	NA
Percent of Sales by Largest 10% of Farms	56.2	52.8	44.8	NA	NA

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[1] Thomas A. Miller, Gordon E. Rodewald, and Robert G. McElroy, *Economies of Size in U.S. Field Crop Farming,* Agricultural Economic Report No. 472 (Washington, D.C.: U.S. Department of Agriculture, Economics and Statistics Service, July 1981).

Figure 1 depicts the LRAC curve arrived at by the study for grain farms in the corn belt region. Gross income depicted on the horizontal axis is a proxy for farm size. The vertical axis shows the cost per dollar of gross income. The vertical distance between the LRAC curve and the one dollar line is equal to net farm income per dollar of gross income. For example, if a farm is grossing $20,000 per year, the cost per dollar of gross income would be roughly $0.60 and net farm income per dollar of gross income would be $0.40. Net farm income in this case is a return to all residual claimants: owned land, equity capital, and operator inputs such as labor, management, and entrepreneurship. In other words, after all cash costs have been met, the remaining net income is a return for the operator's investment, time, and expertise.

Looking at Figure 1, cost per dollar of gross income ranges from around $0.59 for farms grossing $20,000 to $0.48 for farms grossing $160,000, an $0.11 differential from the smallest to the largest farms in the study. Farms which are grossing from $40,000 to $60,000 have costs per dollar of gross income which are $0.08 to $0.05 higher than the largest farm. This general relationship also held for other field crop farming regions. Figure 2 shows the average LRAC curve for the seven field crop farming regions. Here again, costs per dollar of gross income for the smallest farm are about $0.10 higher than the largest farm, and farms grossing between $40,000 and $60,000 have costs per dollar of gross income which range from $0.05 to $0.02 higher.

The study concludes that economies of size in field crop farming are not great. According to the report, "The cost curves estimated in this study suggest that technical economies of size exist on field crop farms but that their importance is not great. The estimated LRAC curves decline significantly at first and then are relatively flat over a wide range. Small or medium-size farms in most regions are nearly as efficient as large farms."[2]

Implications for Farm Managers. The study concludes that for all but the smallest farms, economies of size are not a significant factor in the success or failure of a farm. The report says, "Based on this more general view of factors affecting efficiency, farm managers should avoid concluding that size is the primary determinant of efficiency. Past some minimum point when a small machinery complement can be efficiently utilized, factors other than size are much more important in controlling per-unit costs. Concentrating on management and productivity appears to be the most important means of increasing efficiency for commercial farms; size is of much less importance."[3]

Of course, the biggest problem facing smaller farms is low income. Although per-unit cost and per-unit net income of smaller farms may be similar to those of larger farms, smaller farms simply produce fewer units and, therefore, realize smaller income. Again looking at Figure 2, net farm income is estimated for farms with various gross incomes. The income levels associated with the smallest farms are generally inadequate to support a family. The study notes, however, that many of the smallest farms are part-time units, and that if the farming unit can be combined with other income-producing activities such as custom services, livestock production, or off-farm employment, the production unit may be both efficient and viable.

It should also be pointed out that the USDA study considered only standard cropping methods. One might legitimately ask whether alternative technologies considered to be more appropriate for smaller farms might further enhance the viability of small farms.

Implications for the Growth in Farm Size. Technological change is not always accompanied by increasing economies of size. In this case, it appears that technological change has *allowed*, rather than *forced* farms to grow larger. In other words, the technological changes which have occurred have allowed larger farms to produce at a per-unit cost which is roughly equivalent to smaller farms, whereas at an earlier time they could not. In summarizing previous studies along with

(continued on page 5)

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[2] Ibid., p. 20.

[3] Ibid., p. 22.

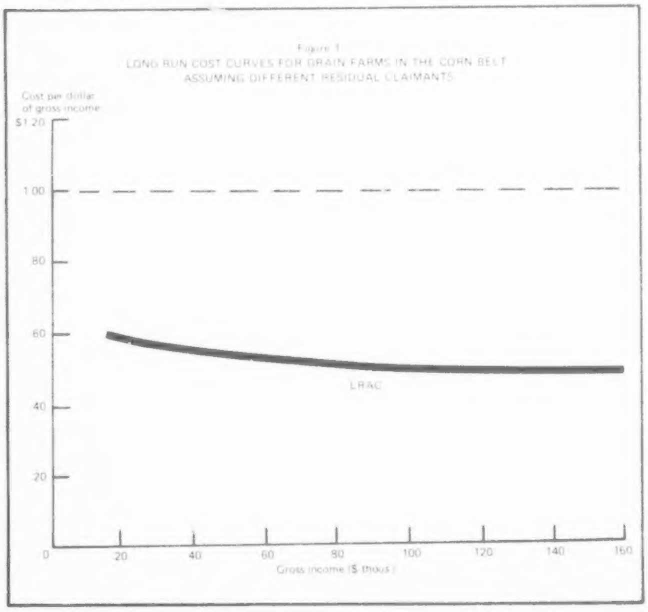


Figure 1
LONG RUN COST CURVES FOR GRAIN FARMS IN THE CORN BELT ASSUMING DIFFERENT RESIDUAL CLAIMANTS

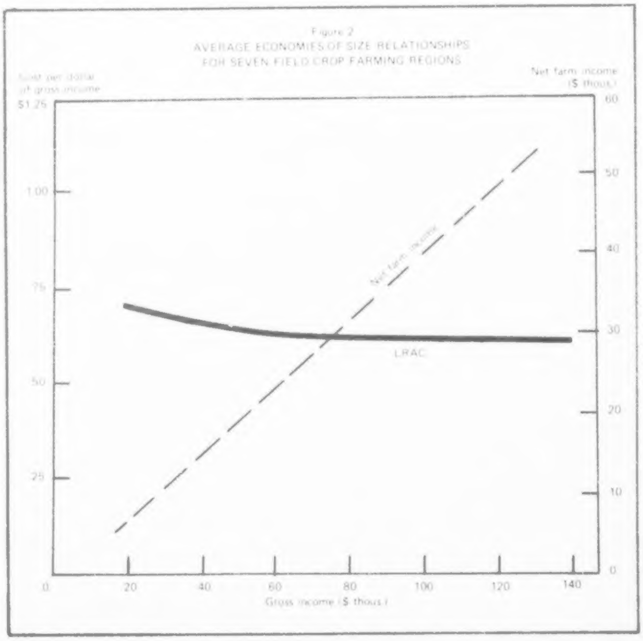


Figure 2
AVERAGE ECONOMIES OF SIZE RELATIONSHIPS FOR SEVEN FIELD CROP FARMING REGIONS

Review and Outlook

A slight decrease in economic activity was recorded in Nebraska in September, with the index slipping 0.6 percent to 139.8 (1967 = 100). All sectors were down, with the exception of manufacturing which recorded a gain of nearly 3 percent.

The agriculture index slipped 0.8 percent following substantial gains in July and August as grain prices tumbled and marketings decreased in volume. The construction index declined again, slipping 6.7 percent from August to September, a sizable one-month decline. The construction index is at its lowest point in 1981, and remains about 10 percent below the June 1980 bottom.

Manufacturing recorded an increase of 2.9 percent in September. This sector has shown a slow but steady increase during much of 1981, with the index peaking in July, declining sharply in August, and now rebounding in September. The July-August-September movements appear to reflect seasonal adjustments in the work force and may not be indicative of fundamental economic trends.

The distributive trade sector and the government sector both recorded decreases in September. The distributive trade sector recorded a decline of 1.3 percent, while the government sector recorded a decrease of 1.2 percent. The government index has drifted erratically lower over the past two years.

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

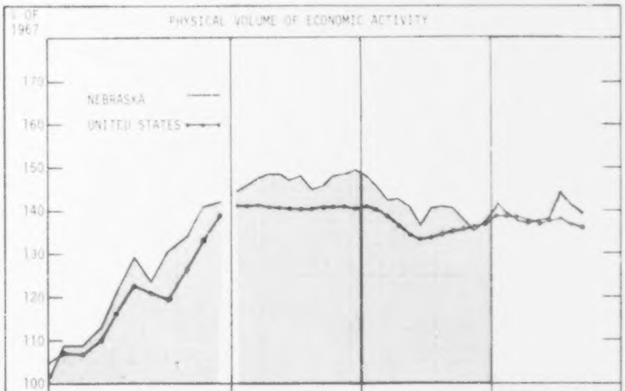
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

September 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	107.2	110.8	108.7	110.8
Agricultural	108.7	110.5	106.7	108.6
Nonagricultural	106.9	110.8	108.9	110.9
Construction	104.3	104.5	128.0	105.1
Manufacturing	110.0	111.8	108.9	110.9
Distributive	106.5	111.3	108.4	111.9
Government	105.0	108.8	106.3	108.7
Physical Volume	100.2	101.2	99.3	100.6
Agricultural	115.2	118.2	100.5	100.7
Nonagricultural	98.0	100.7	99.2	100.6
Construction	99.5	99.6	120.4	98.9
Manufacturing	103.4	103.1	99.5	100.7
Distributive	96.0	100.3	98.0	101.1
Government	97.6	97.4	99.3	99.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	369.8	360.0
Agricultural	385.7	359.5
Nonagricultural	367.1	360.0
Construction	236.7	312.5
Manufacturing	392.5	322.7
Distributive	376.0	390.1
Government	362.7	339.7
Physical Volume	139.8	137.0
Agricultural	153.7	146.8
Nonagricultural	137.6	136.7
Construction	73.3	96.8
Manufacturing	166.5	133.6
Distributive	134.6	139.7
Government	142.2	146.7

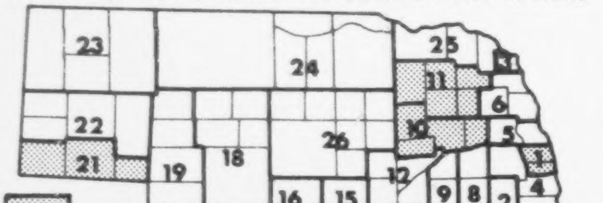


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Sept. 1981 as percent of Sept. 1980	Sept. 1981 as percent of Sept. 1980	Year to date'81 as percent of Year to date'80
The State	93.5	93.5	99.5
1 Omaha	90.2	92.1	102.5
Bellevue	104.4		
2 Lincoln	NA	NA	NA
3 So. Sioux City	109.6	108.5	98.8
4 Nebraska City	88.3	92.1	95.9
5 Fremont	101.2	96.6	97.1
Blair	93.5		
6 West Point	88.2	92.7	92.9
7 Falls City	91.2	94.2	95.7
8 Seward	81.6	89.0	94.5
9 York	94.1	86.8	91.7
10 Columbus	100.2	100.5	100.4
11 Norfolk	98.8	99.7	99.9
Wayne	107.4		
12 Grand Island	88.3	83.7	95.3
13 Hastings	91.9	90.4	97.3
14 Beatrice	103.2	99.0	97.3
Fairbury	93.5		
15 Kearney	97.0	91.0	99.0
16 Lexington	93.6	90.0	94.9
17 Holdrege	96.9	91.7	96.7
18 North Platte	95.7	95.7	94.8
19 Ogallala	94.0	92.3	98.1
20 McCook	85.5	87.2	99.2
21 Sidney	104.7	102.9	100.1
Kimball	114.6		
22 Scottsbluff/Gering	107.6	101.7	98.3
23 Alliance	106.2	102.1	98.9
Chadron	99.3		
24 O'Neill	91.2	91.2	97.2
25 Hartington	90.0	94.3	96.4
26 Broken Bow	104.6	91.0	94.3

*State totals include sales not allocated to cities or regions. The year-to year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 3)

their own, the authors conclude, "These studies all challenge the conclusion that small farms do not support families adequately because they are inefficient and that farms grow to become more efficient. An alternative explanation is that small farms generate low net farm incomes, and these low incomes cause such farms to exit, become part-time units, or expand to increase income, whether or not economies of size exist. The relatively limited economics of size found on field crop farms would tend to support this second explanation. The process is accelerated by farm operators seeking to expand landholdings because of the expectation of capital gain, which often exceeds farm income."[4]

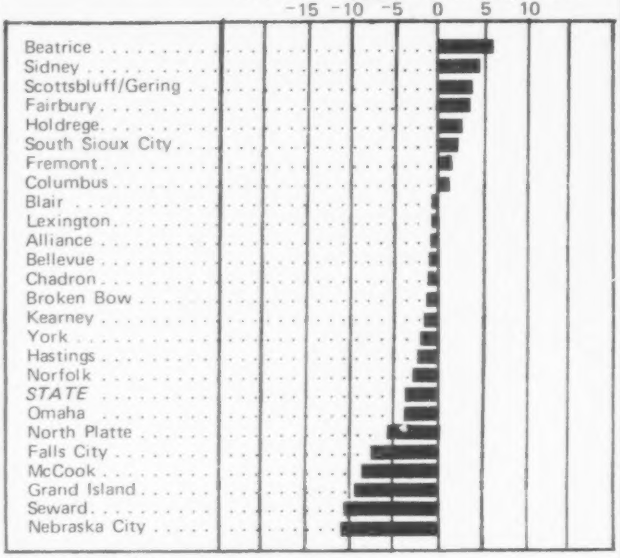
Of course, the increasing difficulty of earning sufficient income from a small farm is the result of several factors. In a very general sense, the rapid increases in the production of agricultural commodities over the years, along with the increasing costs of purchased inputs, have tended to lower commodity prices relative to costs, which in turn have meant lower profit margins and increased growth incentives. Others have pointed out that many government programs designed to aid agriculture in general have inadvertently fostered greater farm consolidation. U.S. tax policy and commodity programs, it is argued, have tended to benefit larger farms the most and, thereby, have increased the incentives for growth. Low farm incomes of smaller farms, the inadvertent impact of public policy, and the simple desire on the part of farmers to increase their farm size are all reasons for farm size growth. Although there are some economies of size using conventional technology, efficiency appears to be a minor factor in farm consolidation.

ECONOMIES OF SIZE AND NEBRASKA FARMS

Using data from the Nebraska Crop and Livestock Reporting Service on the value of crops produced, and data from the Census of Agriculture on the number of farms which harvested cropland, rough estimates were made of the average value of crops produced by farms in Nebraska during 1978. In 1978, the value of crop production per farm with harvested cropland averaged $46,705. Other estimates were made for the central, south, southeast, east, and northeast parts of the state, since these areas more closely approximate the corn belt type of farm (see Figure 3, p. 6). The value of crop production per farm with harvested cropland averaged $61,849 in the south, $52,871 in the east, $51,620 in the central, $44,772 in the southeast, and $44,251 in the northeast. These estimates are probably on the low side if one is estimating for a typical cash grain farm, since many

(continued on page 6)

CITY BUSINESS INDEXES
Percent Change Sept. 1980 to Sept. 1981



Source: Table 3 (page 4) and Table 4 below.

4. SEPTEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	101.8	70.1	93.7
Alliance	96.7	67.1	101.6
Beatrice	101.3	229.6	89.3
Bellevue	102.3	46.2	89.0
Blair	104.7	113.3	75.9
Broken Bow	102.4	39.7	100.1
Chadron	100.0	83.1	94.1
Columbus	104.0	76.3	84.3
Fairbury	102.1	290.5	105.5
Falls City	102.5	40.5	92.6
Fremont	102.1	85.5	102.4*
Grand Island	101.9	33.2	103.1
Hastings	102.1	121.1	109.5
Holdrege	103.1	165.3	97.8
Kearney	101.8	84.3	99.3
Lexington	103.4	122.7	106.7
Lincoln	99.8	71.0	87.2
McCook	102.0	57.3	91.0
Nebraska City	101.1	24.5	86.1
Norfolk	101.9	60.3	100.6
North Platte	100.3	44.8	84.5
Omaha	102.3	90.3	93.8
Scottsbluff/Gering	104.2	67.5	92.8
Seward	101.5	48.0	88.4
Sidney	103.2	116.5	101.8
So. Sioux City	98.6	72.2	98.6
York	104.2	86.2	93.9

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

September 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	279.3	110.0	110.6
Commodity component	257.7	107.8	109.1
Wholesale Prices	295.5	107.6	109.4
Agricultural Prices			
United States	245.0	93.5	107.7
Nebraska	251.0	94.4	106.5

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

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[4] Ibid., p. 22.

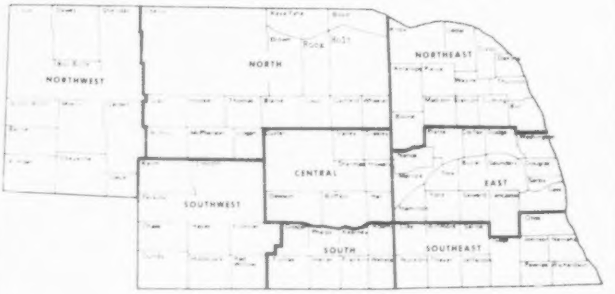
(continued from page 5)

noncommercial farms with sales below $2,500 per year are included, as are some ranches which raise small amounts of grain.

From these estimates and the USDA study it would appear that, on the average, Nebraska field crop farms are more than adequate in size to realize most economies of size. In addition, it would appear that the income-producing potential of these farms under normal conditions would make them viable units. In fact, as the USDA study points out, field crop farms much smaller than these may be both efficient and viable if they are managed well, and if they can be combined with other income-producing ventures which fully utilize the operators' labor and other inputs.

LYNN NEJEZCHLEB

Figure 3
NEBRASKA CROP REPORTING DISTRICTS



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TELECOURSES

Courses in computer science and flexible reading are available starting February 6, 1982 on the Nebraska Educational Television Network (NETV). "Making It Count (Computer Science 103s)" and "Flexible Reading" are Telecourses, a program of the University of Nebraska-Lincoln Division of Continuing Studies. Any adult can enroll. Books arrive in the mail.

"Making It Count (Computer Science 103s)" is an introduction to computing for which students can earn two hours of University credit. The course acquaints students with hardware and software fundamentals, computer languages, and programming logic. Students follow the development of a computer system to solve a typical problem, and study the computer's role in management decision making and in society at large. Operating systems, multiprogramming, system analysis in current computer applications, and the selection and use of computer resources also are discussed.

"Flexible Reading" is a noncredit course to help people learn to read faster *and* "smarter." For persons who do a great deal of reading as part of their jobs or their lives, this course hones skills in using different reading speeds, various methods and diversified strategies for different kinds of materials read, and different purposes for reading. A self-directed workbook, which contains information and exercises to make flexible reading part of life, allows participants to study on their own or with friends.

Other Telecourses available this semester are: "Focus on Society (Sociology 153s)"; "World Food Problems (Agriculture 492s)"; "Shakespeare (English 230s)"; "Real Estate Principles and Practices (Finance 382s)"; "Loosening the Grip (Psychology 222s)"; "Home Landscape Gardening"; and "Energy and the Way We Live (Engineering 212s)."

For more information on these Telecourses, call 472-3587 in Lincoln. Elsewhere in the state call toll free 800-742-7511, and be sure to ask for Telecourses.

* * * * * * *

VIDEO-TAPE OF VOLCKER SPEECH

On November 11, 1981, Mr. Paul A. Volcker, Chairman of the Federal Reserve Board of Governors, Washington, D.C., delivered the E. J. Faulkner Lecture at the University of Nebraska-Lincoln.

The lecture, "The Framework for Prosperity and Growth," was video-taped and is available on a loan basis without charge to interested groups. Inquiries should be addressed to Donald E. Pursell, Center for the Study of the American Business System, 200 CBA, University of Nebraska-Lincoln, Lincoln, NE 68588. Telephone: (402) 472-2334.

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Business in Nebraska

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College of Business Administration

DOUGLAS COUNTY VACANCY RATES AND HOUSING DATA

Omaha vacancy rates were lower than those in Nebraska while rents were slightly higher, according to the 1980 Census of Housing. The value of housing in Omaha was slightly below the average for Nebraska and the United States.

In 1980, vacancy rates in Omaha were 5.5 percent of all year-round housing units. This compares with a rate of 5.9 percent for Douglas County and 7.6 percent for Nebraska. Comparable figures are not available for the United States. Rents in Omaha were below the U.S. average but above the average for Nebraska, as one would expect. The median monthly rent in the city of Omaha was $175, which compares with a median rent of $185 for all of Douglas County, $170 for Nebraska, and $198 for the United States. Map 2, p. 6, identifies Douglas County tracts.

Whenever the value of owner-occupied housing is examined, the 1980 Census of Housing established a median for Omaha of $34,400. For all of Douglas County the median was $39,100, while for Nebraska the median was $38,000. Median values in Nebraska were below the U.S. median, which the Census established at $47,200.

TRACT DATA

An analysis of 1980 Douglas County housing data by census tract (Table 1, pp. 2,3) reveals vacancy rates from less than 1/10 of 1 percent to as high as 28.4 percent (tract 14). The Bureau of the Census defines census tracts as small areas into which large cities and adjacent areas have been divided for statistical purposes. Tracts are designed to be relatively homogeneous with regard to population characteristics and generally have an average size of approximately 4,000 residents, although this number may vary from a few inhabitants to nearly 10,000 inhabitants. Tracts are a useful small-area designation within larger metropolitan areas.

The vacancy rate for all housing—owner occupied and renter occupied—was 5.9 percent in 1980. Tracts with a vacancy rate above the average for Douglas County are identified by the shaded area in Map 1. Tracts with a high vacancy rate are concentrated near the inner parts of the city and near downtown. By contrast, tracts with below-average vacancy rates are to be found in the outer areas of the city.

Generally, the proportion of owner-occupied housing increases as one moves away from the inner part of Omaha. Within the central area, owner-occupied housing is less than one-half of total housing units. As one moves to the periphery of the city and outside Omaha's boundaries, the proportion of owner-occupied housing increases. For Douglas County, owner-occupied housing constitutes 63.3 percent of all housing units, according to the 1980 Census.

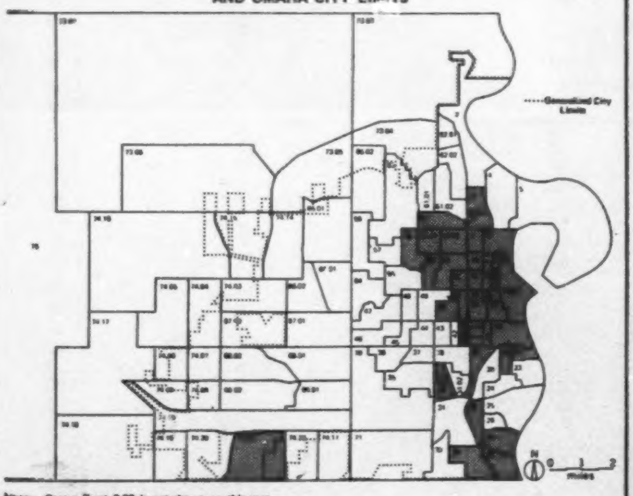
The value of owner-occupied housing is also summarized in Table 1. For Douglas County, the median value was $39,100 as specified by the owners. Median tract values range from a low of $9,900 in tracts 11, 13.2, and 15 to a high of $178,900 in tract 74.20. Tracts with median value over $100,000 include tracts 67.02 and 74.04

As mentioned above, Douglas County rents were above Nebraska rents but below national rents. For Douglas County, median rent was $185. Rent values increase toward the boundaries of the city and beyond. In the central area near downtown Omaha, monthly rents of $85–$125 are frequent. Moving toward the west from the center part of Omaha, rents rise almost without exception. The highest median rent—$338 per month—was recorded in tract 47. Tract 74.03 reported a median rent of $327.

The number of housing units in Douglas County was 155,311 in 1980, up from 129,842 in 1970. The average number of occupants per housing unit declined to 2.66 in 1980, down from 3.11 in 1970.

D. E. P.

MAP 1
1980 DOUGLAS COUNTY CENSUS TRACTS
AND OMAHA CITY LIMITS



Note: Census Tract 2.99 is not shown on this map.
Census Tract 75 extends to the western edge of Douglas County; its entirety is not shown on this map.

▨ Above-average vacancy rates.

Table 1
METROPOLITAN OMAHA HOUSING TRACT DATA, 1980 CENSUS

Tract Number	Vacancy Rate	Average Number of Persons per Housing Unit	Percent Owner Occupied	Median Rent per Month	Median Value Owner Occupied	Number of Housing Units
2	2.0	2.78	86.4	$157	$25,000	1,094
3	9.1	3.08	70.5	143	14,900	975
4	5.8	2.40	80.6	120	14,700	1,100
5	4.8	2.58	67.2	103	13,000	272
6	11.0	2.77	55.8	107	12,100	889
7	14.8	2.55	47.9	90	12,300	782
8	23.8	3.09	66.7	112	12,200	998
9	20.2	2.71	49.3	115	9,900	529
10	13.3	2.66	46.6	85	12,000	671
11	14.3	2.47	50.5	86	9,900	582
12	14.8	2.77	28.4	81	11,000	600
13.1	30.7	2.39	43.1	96	10,400	358
13.2	16.7	2.55	50.6	119	9,900	278
14	28.4	2.50	17.4	82	9,900	169
15	15.9	2.59	49.5	100	9,900	233
16	21.3	1.33	4.2	173	27,500	418
17	16.2	1.52	3.9	117	13,800	610
18	15.8	1.25	4.7	110	15,000	551
19	16.0	1.47	6.4	132	15,400	1,207
20	5.2	2.36	57.5	135	18,200	1,188
21	8.4	2.23	43.1	102	18,000	1,083
22	6.2	2.47	47.1	125	18,500	627
23	3.4	2.60	58.6	149	22,300	882
24	5.5	2.47	57.4	142	20,300	1,347
25	5.5	2.55	75.6	145	22,200	1,009
26	5.8	2.76	65.9	140	23,100	765
27	6.0	2.41	62.3	138	19,700	838
28	6.6	2.46	70.4	157	22,300	1,252
29	8.4	2.90	53.9	95	19,500	1,628
30	2.4	2.70	87.0	163	27,300	2,352
31	2.7	2.65	77.7	124	25,300	1,313
32	8.0	2.01	34.7	116	21,700	1,060
33	9.5	2.62	57.9	144	18,000	883
34	7.8	2.37	65.3	175	29,500	1,578
34.2	2.0	2.75	80.4	163	30,000	981
35	1.5	2.41	71.1	228	37,800	1,989
36	1.9	2.36	84.6	198	34,400	2,024
37	2.2	2.60	89.2	201	39,000	1,105
38	5.3	2.24	38.0	147	35,200	1,967
39	10.7	1.98	20.2	151	21,700	1,260
40	9.9	1.47	9.7	125	22,700	1,357
41	11.2	1.43	2.8	157	37,500	597
42	5.6	1.77	18.8	170	27,300	924
43	4.4	1.60	21.7	180	32,200	1,619
44	4.9	2.25	58.6	165	28,900	811
45	2.4	2.30	72.8	213	41,600	1,525
46	3.3	2.65	72.7	239	52,400	1,018
47	2.5	3.05	94.6	338	87,500	836
48	2.8	1.99	33.6	182	41,200	2,401
49	5.2	2.01	29.5	167	24,600	2,451
50	7.9	2.01	26.8	164	29,700	2,069
51	11.3	2.33	29.7	161	18,500	1,441
52	8.1	3.16	30.7	81	11,900	972
53	13.4	2.89	62.4	118	12,500	912
54	7.1	2.95	57.0	152	15,700	1,399
55	1.6	2.44	78.2	198	42,300	2,273
56	2.8	2.40	73.9	180	27,600	1,819
57	2.8	2.41	68.2	144	27,000	1,986
58	6.1	2.56	66.4	160	27,300	1,971
59.01	7.2	3.09	65.6	147	16,500	1,034
59.02	10.9	2.82	64.4	129	15,400	1,186
60	6.7	2.84	68.1	140	15,200	1,646
61.01	5.1	3.36	67.1	170	22,900	957
61.02	4.4	3.09	81.3	161	21,800	1,643
62.01	5.6	2.33	59.1	177	27,600	233
62.01	3.0	2.96	85.0	180	25,000	1,738
63	3.6	2.75	70.5	204	33,000	3,238
64	3.2	2.61	74.3	178	33,400	2,237
65.01	2.2	2.76	78.1	251	44,600	2,448
65.02	2.1	3.31	85.2	228	35,400	1,445
66.01	3.6	2.37	57.4	212	39,600	3,126
66.02	4.9	2.18	38.0	276	42,100	2,166
67.01	1.6	2.51	72.9	240	77,300	1,474
67.02	5.4	2.65	59.6	291	70,500	1,022
68.01	2.6	2.61	67.5	235	70,800	2,210

(continued on p. 3)

Table 1 (continued)

Tract Number	Vacancy Rate	Average Number of Persons per Housing Unit	Percent Owner Occupied	Median Rent per Month	Median Value Owner Occupied	Number of Housing Units
68.02	1.8	3.04	87.4	$252	$79,300	1,280
69.01	1.3	3.19	81.6	244	41,500	1,966
69.02	2.5	3.16	77.6	232	65,200	2,596
70	4.2	2.57	61.1	228	36,900	3,705
71	2.9	3.02	79.2	177	33,000	2,249
74.03	5.1	2.48	50.7	327	82,900	709
74.04	2.0	3.49	96.8	243	85,000	1,063
74.06	2.9	3.52	92.9	273	67,600	962
74.07	3.0	2.79	62.4	257	57,900	1,340
74.08	3.2	3.05	64.9	221	40,400	1,631
74.09	0.2	3.36	79.4	189	43,200	444
74.14	2.3	3.04	73.2	266	46,600	3,869
74.15	3.2	2.70	67.9	254	65,700	712
74.19	2.4	3.12	80.0	193	41,800	819
74.20	2.6	3.26	77.2	229	48,700	1,811
74.21	15.8	1.63	0.1	235	- - -	1,977
74.22	3.7	2.83	58.3	212	49,400	1,722

OUTSIDE OMAHA

Tract Number	Vacancy Rate	Average Number of Persons per Housing Unit	Percent Owner Occupied	Median Rent per Month	Median Value Owner Occupied	Number of Housing Units
63 Benson Prec.	6.8	3.17	23.7	67	45,000	308
65.02 Benson Prec.	*	*	*	*	*	19
75 Elkhorn City	1.9	2.96	81.5	167	44,400	463
75 Chicago-Baker	7.0	3.34	91.6	180	65,100	1,732
74.11 Ralston City	2.8	2.85	70.3	209	44,700	1,729
74.22 Ralston City	2.0	3.52	85.0	290	48,800	102
69.01 Rem. Douglas Prec.	4.0	3.29	100.0	*	61,500	25
71 Rem. Douglas Prec.	7.1	3.52	97.1	*	40,000	112
74.11 Rem. Douglas Prec.	2.2	3.39	99.2	*	64,300	271
74.12 Rem. Douglas Prec.	10.3	1.87	7.4	228	69,700	978
75 Elkhorn Prec.	1.7	3.42	80.5	155	55,300	287
63 Florence Prec.	4.0	2.25	100.0	*	65,000	25
73.03 Florence Prec.	6.6	3.07	88.6	206	64,200	518
73.04 Florence Prec.	2.9	3.07	97.7	155	70,600	488
73.07 Bennington Vil.	4.0	2.95	73.8	151	34,900	223
73.06 Rem. Jefferson Prec.	3.1	2.95	80.6	250	46,200	64
73.07 "	4.1	3.49	81.7	185	48,600	217
74.05 Boys Town	6.8	2.73	- - -	174	- - -	44
66.02 Rem. McArdle Prec.	6.2	1.78	96.7	*	68,600	64
67.02 "	4.2	2.44	53.2	414	137,900	1,075
74.03 "	11.2	2.53	47.2	221	46,200	934
74.04 "	12.2	2.24	41.1	283	106,700	854
74.14 "	8.4	1.57	4.6	232	45,600	645
74.15 "	8.7	2.54	42.6	242	66,400	2,418
74.16 "	5.5	3.06	96.5	288	58,100	2,046
74.17 "	8.4	3.33	97.2	386	67,200	860
74.06 Millard Prec.	19.7	2.93	60.3	222	70,800	867
74.07 "	0	3.82	100.0	- - -	89,400	77
74.08 "	2.7	3.55	96.3	*	63,100	111
74.09 "	35.1	3.21	79.2	456	64,100	74
74.17 "	8.1	3.58	96.1	424	71,800	2,127
74.18 "	5.1	3.54	88.7	325	6,500	1,855
74.19 "	2.1	3.08	70.0	239	51,900	1,373
74.20 "	11.9	2.70	97.4	*	178,900	176
74.21 "	3.2	3.36	82.3	238	57,900	1,692
75 Valley City	7.3	2.69	65.4	155	30,000	667
75 Rem. Platte Valley Prec.	18.9	2.85	80.2	154	36,900	567
65.01 Union Prec.	1.9	3.58	98.7	*	54,800	156
65.02 "	2.5	3.14	96.8	155	79,500	162
73.03 "	3.3	3.30	91.2	275	88,600	153
73.04 "	4.3	3.23	86.4	*	40,000	23
73.05 "	13.8	2.98	68.4	231	46,700	1,293
73.06 "	17.7	2.52	57.4	260	58,600	1,055
73.07 "	2.9	2.97	84.5	155	58,100	272
75 Waterloo Village	4.0	2.66	77 5	120	69,900	176
75 Rem. Waterloo Prec.	8.0	2.94	84.0	158	53,600	538

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* Suppressed to avoid disclosure.

Review and Outlook

The Nebraska net physical volume index increased 0.8% in October from the September level. The increase was largely because of a substantial jump in cash marketing receipts which pushed the agricultural component higher. The nonagriculture component of the state's economy declined 0.1%.

Cash farm marketing receipts in Nebraska were estimated at $836 million for October 1981. This represents an increase of $333 million from September 1981 and was $220 million higher than October 1980. The increase in cash farm marketing receipts was 35.7% above the October 1980 level.

Nebraska had a much greater percentage increase in cash farm marketing receipts than nationally. Marketing receipts for the United States totaled $17.4 billion in October, up $1.7 billion above the October 1980 level for an increase of approximately 11%. The tendency for increased marketing activity in October was apparent in Nebraska and nationally, but Nebraska certainly outdid the nation with regard to expanding the volume of cash marketings in October.

Prices received by Nebraska farmers were down 2.4% September-October 1981. On a year-to-year basis, prices received by Nebraska farmers were down 11.2%. This compares with a price decrease over the same interval of 9.1% for agriculture prices across the United States. Prices paid increased 4.9% over the interval October 1980-October 1981.

Among the state's nonagricultural

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

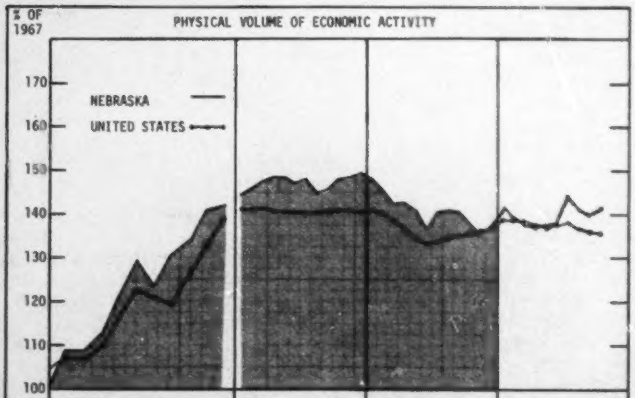
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

October 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	107.4	108.6	108.6	110.6
Agricultural	121.3	110.6	108.3	108.8
Nonagricultural	105.4	108.5	108.6	110.7
Construction	95.6	100.8	124.6	104.7
Manufacturing	105.7	107.9	108.5	110.6
Distributive	105.4	109.6	108.1	111.6
Government	107.5	107.7	106.8	108.6
Physical Volume	101.9	99.9	99.6	100.6
Agricultural	136.7	121.6	103.9	102.6
Nonagricultural	97.5	99.3	99.1	100.5
Construction	90.9	95.9	117.4	98.6
Manufacturing	101.1	100.4	99.7	100.6
Distributive	95.6	99.4	97.8	101.0
Government	101.2	97.4	99.9	99.0

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	374.5	358.2
Agricultural	399.9	350.0
Nonagricultural	370.4	358.5
Construction	226.8	307.3
Manufacturing	383.7	316.4
Distributive	381.7	389.8
Government	378.0	345.4
Physical Volume	141.7	135.8
Agricultural	163.2	145.2
Nonagricultural	138.4	135.5
Construction	69.8	94.6
Manufacturing	162.5	130.3
Distributive	136.4	139.3
Government	147.5	147.2

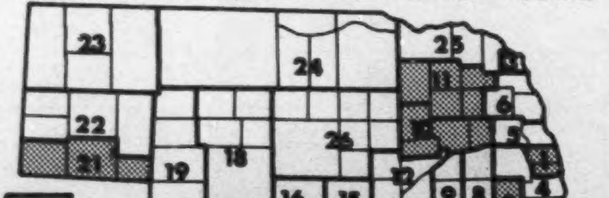


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Oct. 1981 as percent of Oct. 1980	Oct. 1981 as percent of Oct. 1980	Year to date'81 as percent of Year to date'80
The State	91.9	91.4	98.6
1 Omaha	93.3	93.9	101.4
Bellevue	99.6		
2 Lincoln	86.6	86.7	100.1
3 So. Sioux City	87.2	88.5	97.7
4 Nebraska City	93.1	93.7	95.6
5 Fremont	93.1	87.2	96.0
Blair	92.5		
6 West Point	92.4	89.6	92.5
7 Falls City	92.0	94.2	95.6
8 Seward	92.0	83.2	93.2
9 York	92.9	87.2	91.2
10 Columbus	87.5	88.7	99.1
11 Norfolk	93.7	94.0	99.2
Wayne	94.8		
12 Grand Island	87.3	83.8	94.0
13 Hastings	93.7	91.9	96.7
14 Beatrice	92.0	93.3	96.9
Fairbury	106.4		
15 Kearney	93.0	89.5	97.9
16 Lexington	100.8	91.6	94.5
17 Holdrege	86.6	88.6	95.8
18 North Platte	92.4	91.3	94.4
19 Ogallala	83.3	85.3	96.8
20 McCook	101.6	93.9	98.7
21 Sidney	102.7	103.9	100.5
Kimball	108.6		
22 Scottsbluff/Gering	91.6	86.1	97.0
23 Alliance	101.1	89.5	97.9
Chadron	86.6		
24 O'Neill	96.5	89.0	96.3
25 Hartington	106.0	86.0	95.2
26 Broken Bow	87.8	89.3	93.8

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

sectors, output was down 0.1% September-October. Construction recorded a 4.8% decline in October, the seventh consecutive monthly decline in this index. The construction index peaked at 102.7 in March 1981 and has declined since. The construction index for October 1981 was below the levels recorded in October 1979 and 1980. The index is only about four points above the bottom reached in June 1980.

Output from the manufacturing sector, as measured by the Bureau of Business Research's physical volume index, declined 2.3% in October. The index is above the October 1980 reading of 160.7, but below the October 1979 reading of 172.8.

The manufacturing index reached its trough in August 1980 at 159.1 and has moved erratically since. The index peaked in 1981 at 168.9, dropped in August only to recover somewhat in September, but has now dropped again with the October reading.

The distributive trade component of the net physical volume index increased 0.9% September-October. Output in the distributive trade sector has shown little change during the past three months. Like the other sector indexes, this component is below levels recorded in October 1979 and 1980.

Output in the government sector was up 0.1% in September-October. The index is approximately 1% above the October 1979 and 1980 levels.

Nebraska's retail sales were down 2% September-October. Nationally, retail sales were down 1.5% over the same interval. Year-to-date retail sales on a dollar volume basis are up 7.3% in Nebraska, which is well below the year-to-date 10.5% increase recorded nationally.

Some Nebraska cities had real increases in retail sales in October 1981 when compared with year-earlier levels. Cities recording real gains include Fairbury, 6.4%; Lexington, 0.8%; McCook, 1.6%; Sidney, 2.7%; Kimball, 8.6%; Alliance, 1.1%; and Hartington, 6.0%. On a year-to-date basis, cities recording an increase in real retail sales include Omaha, 1.4%; Lincoln, 0.1%; and Sidney, 0.5%. Regions performing better than the state's average include Regions 1, 2, 10, 11, 20, and 21.

Retail sales were adjusted using the commodity component of the Consumer Price Index. On an October-to-October basis (1980-1981), the total Consumer Price Index was up 10.2%. The commodity component of this index, however, was up 7.1% over the same interval. Rapidly rising housing prices are largely responsible for the higher inflation rate, as measured by the total Consumer Price Index.

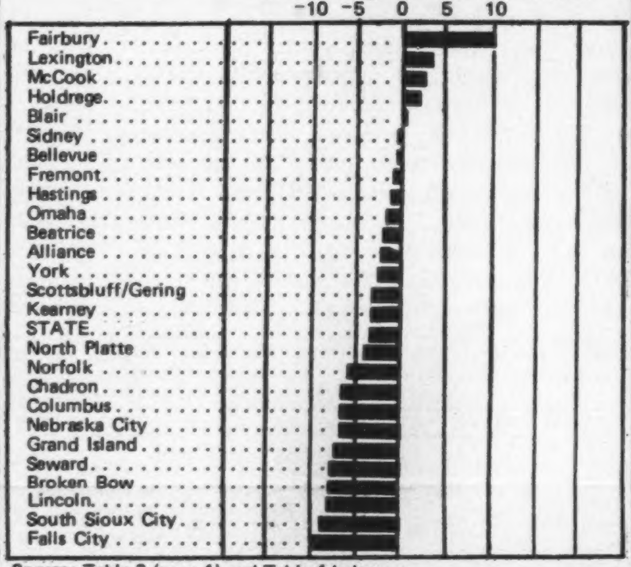
D. E. P.

5. PRICE INDEXES

October 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	279.9	110.2	110.6
Commodity component	257.9	107.1	108.9
Wholesale Prices	296.0	106.6	109.1
Agricultural Prices			
United States	241.0	90.9	105.8
Nebraska	245.0	88.8	104.5

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change Oct. 1980 to Oct. 1981



Source: Table 3 (page 4) and Table 4 below.

4. OCTOBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	101.2	90.7	92.8
Alliance	99.0	66.1	93.7
Beatrice	100.0	151.8	88.3
Bellevue	101.5	82.5	109.5
Blair	102.2	166.1	93.5
Broken Bow	101.3	58.9	93.2
Chadron	101.1	87.6	91.6
Columbus	102.2	72.2	90.5
Fairbury	101.6	383.4	86.7
Falls City	101.7	22.8	91.6
Fremont	104.3	114.5	97.7*
Grand Island	101.1	68.0	98.9
Hastings	101.6	128.9	87.6
Holdrege	101.9	377.1	104.6
Kearney	101.2	84.1	96.7
Lexington	102.3	147.2	91.9
Lincoln	99.5	74.8	92.2
McCook	101.5	107.4	93.5
Nebraska City	100.6	49.5	86.8
Norfolk	100.7	50.4	96.8
North Platte	100.1	79.7	91.3
Omaha	101.5	131.4	92.7
Scottsbluff/Gering	102.8	83.0	85.0
Seward	100.6	43.1	91.3
Sidney	101.2	68.7	93.5
So. Sioux City	96.8	67.5	90.6
York	102.2	98.1	82.9

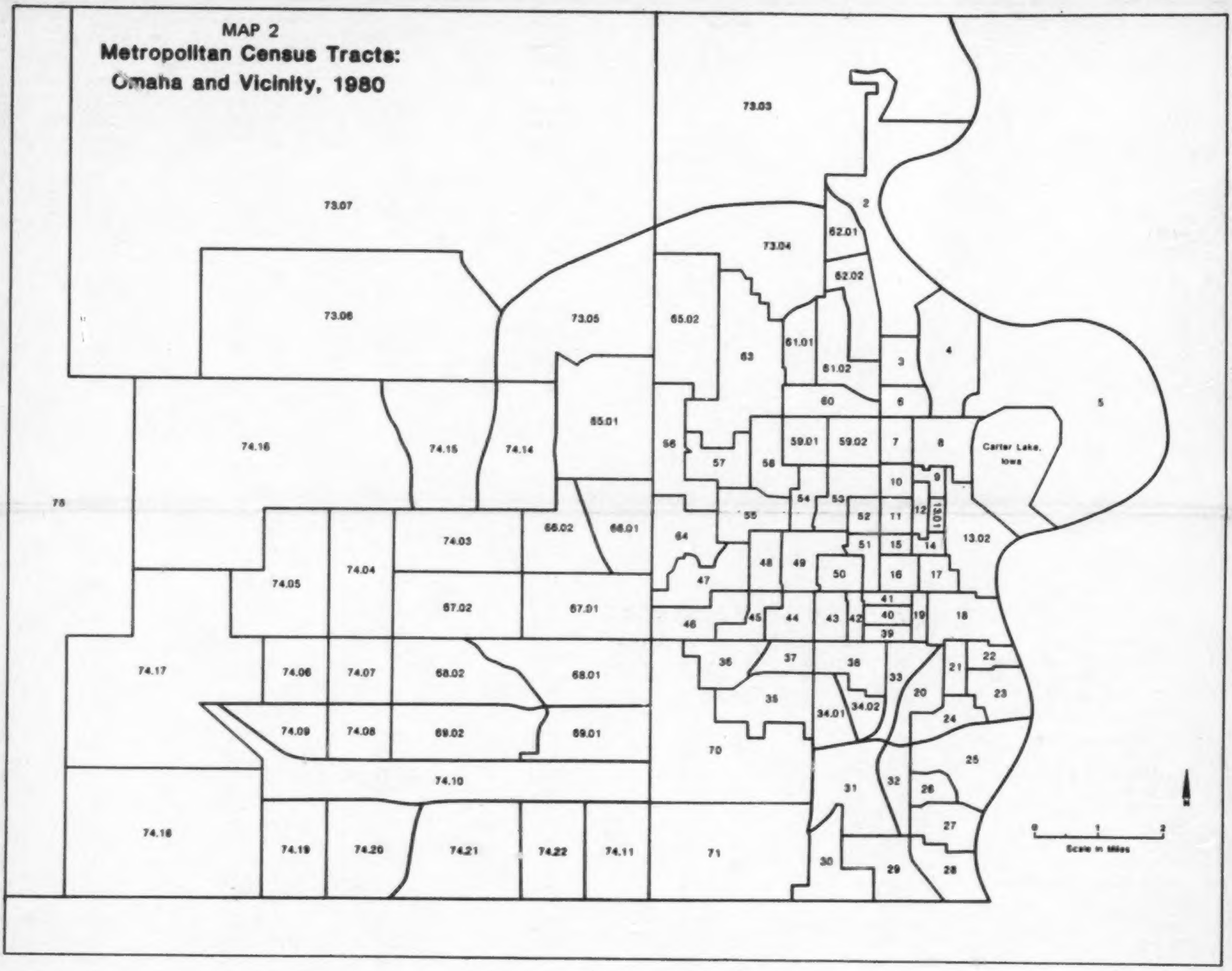
[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

MAP 2
Metropolitan Census Tracts:
Omaha and Vicinity, 1980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Business in Nebraska

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GENERAL POPULATION AND HOUSING CHARACTERISTICS FOR NEBRASKA COUNTIES: 1980

The first in a series of five summary tape files from the 1980 census recently has been released for Nebraska. Summary Tape File 1 (STF 1) contains complete-count data, that is, all the information contained on the short form and obtained from 100 percent of the population. Population items tabulated include age, race, sex, marital status, Spanish origin, household type, and household relationship. Housing items tabulated include occupancy/vacancy status, tenure, contract rent, value, condominium status, number of rooms, and plumbing facilities. In addition, selected aggregates, means, and medians are contained on STF 1. This file, however, does not contain any sample data such as income, employment, or education.

Selected population and housing statistics derived from STF 1 are presented in Table 1 on pages 2 and 3. These data, along with sample data, will be published toward the end of 1982 by the Census Bureau in a publication entitled *Summary Characteristics for Governmental Units.*

The data in Table 1 indicate that most of the state's population was aged 18 to 64 years in 1980. In fact, 58.4 percent of the population was in this primary working age group. This was a substantial increase from the 53.4 percent reported in 1970. An additional 13.1 percent of the population was 65 years old and older in 1980, an increase from the 12.4 percent in 1970.

Despite the relative increases in the two older age groups, the percent of persons under 5 changed very little. In 1980, this group accounted for 7.8 percent of the population, while it accounted for 8.1 percent in 1970. This means that the largest drop occurred in the percent of school-aged children. The segment of the population 5 to 17 years old declined from 26.1 percent in 1970 to 20.7 percent in 1980.

The net result of the increases in older age groups and declines in the younger age groups is that the median age in Nebraska rose to 29.7 years in 1980. This compares to the median age for 1970 of 28.6 years.

Table 1 also shows that there was considerable variation in age among Nebraska's counties. Figures 1 and 2 focus on two aspects of these differences: the percent of the population aged 18 to 64 years and median ages.

Median ages were used because an analysis of the data showed that counties with low median ages also were likely to have a smaller proportion of their populations 65 years and over, as well as a larger proportion of their populations under 18 years. Differences in median ages, therefore, can be used to explain variations in several of the other age measures. In addition, counties with low median ages tended to have more persons per household (an indication of young families), higher median housing values and rents, and were among the fastest growing in the state.

Given the previous description, it is not surprising that Sarpy County, with a median age of 25.3 years, had the lowest median age in the state. In all, there were 15 counties with median ages lower than the state average of 29.7 years. As Figure 1 indicates, these counties were spread throughout

(continued on page 3)

Figure 1
MEDIAN AGE

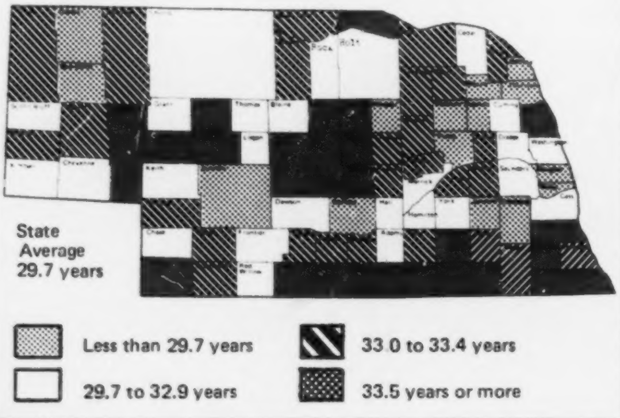


Figure 2
PERCENT OF POPULATION 18 TO 64 YEARS OLD

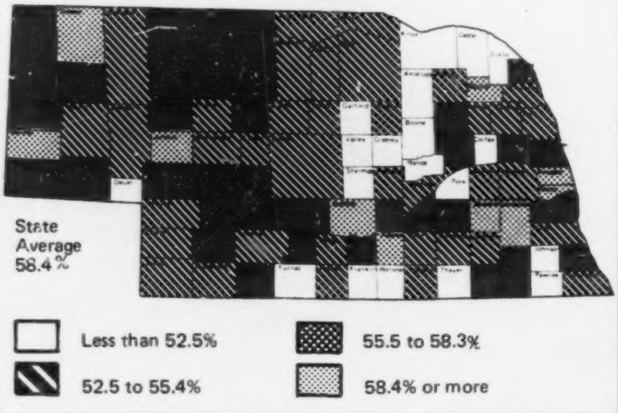


Table 1
SUMMARY OF GENERAL POPULATION AND HOUSING CHARACTERISTICS FROM THE 1980 CENSUS

County	Total Population	Percent under 5 Years	Percent 18-64 Years	Percent 65 Years and Over	Median Age	Number of Households	Persons per Household	Median Value of Owner-Occupied Housing Units—$	Median Rent of Renter-Occupied Housing Units—$	Rental Vacancy Rates
Adams	30,656	7.1	58.4	13.1	31.0	11,740	2.48	41,400	158	6.3
Antelope	8,675	8.4	51.9	18.3	33.2	3,202	2.68	25,600	89	10.4
Arthur	513	6.0	58.7	14.8	36.3	198	2.59	14,100	90	1.3
Banner	918	8.3	59.7	11.0	33.5	315	2.91	23,200	100	4.0
Blaine	867	6.8	52.8	16.1	32.1	307	2.82	11,100	75	8.2
Boone	7,391	8.1	52.3	18.2	33.6	2,681	2.71	22,600	94	8.9
Box Butte	13,696	9.9	57.8	12.5	27.8	5,038	2.68	43,400	191	10.5
Boyd	3,331	7.1	53.7	22.1	41.3	1,267	2.58	16,300	80	11.4
Brown	4,377	7.9	53.3	18.2	33.9	1,698	2.56	28,700	112	13.8
Buffalo	34,797	7.9	61.8	12.0	26.3	12,284	2.63	44,500	166	8.7
Burt	8,813	6.9	52.8	21.0	38.3	3,371	2.56	26,100	93	6.5
Butler	9,330	7.6	52.6	19.2	35.2	3,379	2.70	22,900	111	8.3
Cass	20,297	7.8	56.9	12.8	30.9	7,150	2.80	34,900	137	8.5
Cedar	11,375	8.7	50.0	17.4	30.4	3,819	2.92	25,700	97	6.6
Chase	4,758	8.8	53.3	16.0	32.3	1,722	2.69	31,100	115	16.5
Cherry	6,758	8.1	57.0	14.8	32.5	2,502	2.67	27,100	129	6.7
Cheyenne	10,057	7.6	56.9	15.6	32.9	3,935	2.53	28,200	118	8.5
Clay	8,106	7.7	53.5	17.7	33.3	3,012	2.64	23,600	109	13.3
Colfax	9,890	7.7	51.2	20.5	34.1	3,684	2.64	27,700	121	6.4
Cuming	11,664	7.6	52.7	17.0	32.6	4,052	2.82	33,600	111	4.5
Custer	13,877	7.9	53.1	19.6	35.9	5,271	2.58	25,000	105	11.4
Dakota	16,573	9.3	57.0	10.3	27.5	5,716	2.86	37,600	185	10.4
Dawes	9,609	7.2	60.4	14.6	27.9	3,498	2.47	31,800	137	10.1
Dawson	22,304	8.9	55.9	14.0	30.7	8,179	2.69	35,900	150	9.1
Deuel	2,462	6.5	51.4	21.5	39.1	963	2.53	26,700	81	8.8
Dixon	7,137	7.8	51.7	18.6	33.0	2,551	2.76	24,800	114	7.5
Dodge	35,847	7.5	56.9	15.1	31.7	13,292	2.62	34,300	153	7.0
Douglas	397,038	7.8	60.5	10.4	28.7	146,129	2.66	39,100	185	7.7
Dundy	2,861	7.0	54.9	20.7	39.0	1,148	2.43	21,300	84	15.5
Fillmore	7,920	7.1	53.0	19.9	36.3	3,009	2.55	27,900	105	5.9
Franklin	4,377	6.4	51.5	24.1	42.3	1,743	2.45	18,800	86	10.4
Frontier	3,647	8.1	55.3	17.0	32.2	1,344	2.67	27,400	111	8.2
Furnas	6,486	6.7	50.7	25.1	41.3	2,613	2.39	20,000	84	11.9
Gage	24,456	6.6	56.8	18.1	34.9	9,245	2.51	30,200	129	8.1
Garden	2,802	5.4	54.4	22.1	41.9	1,130	2.41	24,000	90	12.3
Garfield	2,363	6.6	50.3	22.6	38.5	914	2.52	23,100	79	9.1
Gosper	2,140	7.4	56.2	16.2	35.5	774	2.70	35,400	130	10.9
Grant	877	7.8	56.0	13.6	30.5	322	2.72	16,300	108	9.3
Greeley	3,462	8.9	49.5	19.4	33.7	1,213	2.77	18,600	88	7.9
Hall	47,690	8.5	57.4	12.5	29.7	17,463	2.67	43,600	174	8.7
Hamilton	9,301	7.9	55.7	14.0	31.3	3,271	2.77	35,800	131	6.6
Harlan	4,292	6.2	53.3	21.4	39.0	1,688	2.51	22,300	89	9.1
Hayes	1,356	8.0	57.9	13.1	33.0	480	2.83	21,800	92	35.2
Hitchcock	4,079	8.8	53.5	18.4	34.1	1,536	2.61	21,300	97	6.1
Holt	13,552	9.1	53.6	15.4	30.4	4,790	2.78	28,900	114	9.3
Hooker	990	7.6	54.4	19.2	36.6	378	2.54	28,100	110	5.5
Howard	6,773	8.0	52.7	16.6	33.4	2,364	2.83	29,600	111	13.6
Jefferson	9,817	6.4	55.5	20.6	37.8	3,936	2.45	22,400	102	8.2
Johnson	5,285	7.0	52.3	21.8	39.4	2,040	2.55	22,800	89	10.4
Kearney	7,053	7.2	55.9	16.7	33.6	2,543	2.63	36,900	139	7.7
Keith	9,364	7.9	57.3	13.6	32.4	3,491	2.65	38,000	142	15.1
Keya Paha	1,301	8.2	54.6	15.8	33.3	479	2.72	27,800	107	6.6
Kimball	4,882	7.8	56.6	13.9	32.2	1,800	2.67	30,600	117	12.2
Knox	11,457	7.8	52.0	19.2	34.7	4,176	2.68	24,700	87	8.9
Lancaster	192,884	6.9	65.5	10.1	27.6	71,769	2.52	47,300	192	7.0
Lincoln	36,455	8.7	57.4	11.9	29.3	13,245	2.72	44,000	182	8.8
Logan	983	10.6	53.8	14.8	31.4	349	2.74	27,300	133	13.1
Loup	859	6.9	55.1	16.8	35.7	319	2.69	18,800	87	1.1
Madison	31,382	8.4	58.0	14.6	29.5	11,586	2.61	40,100	168	7.6
McPherson	593	6.6	55.1	17.7	37.2	221	2.68	20,700	108	7.9

Table 1 (continued)

County	Total Population	Percent under 5 Years	Percent 18-64 Years	Percent 65 Years and Over	Median Age	Number of Households	Persons per Household	Median Value of Owner-Occupied Housing Units—$	Median Rent of Renter-Occupied Housing Units—$	Rental Vacancy Rates
Merrick	8,945	8.3	53.6	15.7	31.9	3,129	2.80	29,300	117	8.6
Morrill	6,058	8.3	54.1	17.0	33.1	2,230	2.67	27,800	114	11.6
Nance	4,740	8.4	51.9	18.7	34.0	1,712	2.69	21,400	93	12.7
Nemaha	8,367	7.2	56.8	18.4	33.1	3,200	2.49	27,500	118	6.9
Nuckolls	6,726	7.0	53.2	19.8	37.3	2,590	2.53	21,200	85	8.1
Otoe	15,183	6.8	53.6	19.4	36.0	5,801	2.55	31,200	127	8.1
Pawnee	3,937	5.6	52.1	24.8	45.0	1,578	2.45	13,300	83	9.9
Perkins	3,637	9.1	54.2	17.5	34.0	1,361	2.63	32,900	112	6.5
Phelps	9,769	7.7	55.1	17.9	34.1	3,699	2.56	35,800	129	10.4
Pierce	8,481	8.3	53.6	17.1	33.3	3,046	2.74	31,200	104	8.3
Platte	28,852	9.1	56.6	12.2	28.8	10,084	2.84	42,400	158	11.2
Polk	6,320	7.5	51.2	20.0	35.4	2,322	2.66	25,200	94	12.4
Red Willow	12,615	7.9	56.8	15.5	31.7	4,795	2.59	34,600	137	10.2
Richardson	11,315	6.5	52.8	22.4	39.3	,479	2.46	22,600	96	9.5
Rock	2,383	8.1	53.4	16.6	31.6	883	2.67	28,600	97	10.0
Saline	13,131	6.6	55.4	19.9	34.3	4,925	2.50	31,200	135	5.5
Sarpy	86,015	9.3	61.0	3.4	25.3	26,303	3.19	48,000	229	3.4
Saunders	18,716	7.7	54.5	15.8	32.5	6,603	2.80	33,600	129	7.4
Scotts Bluff	38,344	8.4	56.8	13.0	30.1	13,813	2.73	37,300	154	9.2
Seward	15,789	7.8	59.4	14.0	28.6	5,258	2.73	38,600	139	7.2
Sheridan	7,544	8.4	54.1	17.1	33.9	2,813	2.62	27,800	111	9.8
Sherman	4,226	7.0	49.7	20.7	36.7	1,530	2.71	20,500	81	9.8
Sioux	1,845	7.3	58.1	13.8	34.2	663	2.78	21,700	91	3.9
Stanton	6,549	9.8	53.8	12.2	27.9	2,152	3.01	37,200	119	2.4
Thayer	7,582	6.5	52.4	22.0	39.0	2,922	2.52	21,800	101	8.8
Thomas	973	9.1	57.3	12.2	29.9	358	2.72	21,400	100	10.2
Thurston	7,186	9.5	52.5	13.4	28.9	2,347	3.01	24,200	101	10.6
Valley	5,633	7.4	52.1	20.6	36.3	2,170	2.55	26,500	92	9.0
Washington	15,508	7.3	57.6	12.4	30.6	5,257	2.84	41,700	139	8.3
Wayne	9,858	6.7	62.6	13.9	27.2	3,332	2.60	39,800	133	6.1
Webster	4,858	6.7	50.8	23.3	41.7	1,915	2.47	20,900	87	11.3
Wheeler	1,060	9.5	54.0	12.8	29.0	368	2.88	19,800	88	1.7
York	14,798	7.5	57.1	15.1	31.3	5,428	2.63	37,100	141	6.8
Nebraska	1,569,825	7.8	58.4	13.1	29.7	571,400	2.66	38,000	170	7.9

Source: U.S. Bureau of the Census, unpublished data from STF 1A.

(continued from page 1)

the state and showed little geographic concentration, with the possible exception of the cluster of counties in the northeast. Some of the counties with low median ages (less than 28 years) were Buffalo, Wayne, Dakota, Lancaster, Box Butte, Stanton, and Dawes.

Pawnee County population was the oldest in the state, with a median age of 45.0 years. Five other counties had median ages greater than 40: Franklin, Garden, Webster, Boyd, and Furnas. More than one-fifth of the population in these counties was 65 and over.

Many of the counties with the highest median ages were located in the extreme southern portion of the state. Most of these counties have experienced decades of outmigration and population losses. In fact, many are now experiencing natural declines in population, that is, more deaths than births. Another group of counties with relatively high median ages can be found in central and west-central Nebraska.

Ten counties in the state had a larger or the same share of their population in the 18 to 64 category as the state total. These counties were headed by Lancaster County with 65.5 percent. The remainder of these counties were Wayne, Buffalo, Sarpy, Douglas, Dawes, Banner, Seward, Arthur, and Adams. Most of these counties contained a college or other institution which would attract a large number of persons in this category. Counties with relatively large percentages of their populations aged 18 to 64 years generally were among the largest and fastest growing in the state.

Figure 2 shows the geographic distribution of this age group. Counties with the lowest percentages primarily were located in the northeast and central part of the state, but some also are scattered along the Kansas border. Sherman and Greeley counties in central Nebraska were the only counties with less than 50 percent of their populations between 18 and 64.

As the median age of the state has increased and more of the population has become 65 years and over and less is under 18 years of age, the average household size has declined. In 1970, Nebraska had 3.02 persons per household. Ten years later, however, this number dropped to 2.66 persons per household.

Counties in the state exhibited a similar pattern between age and household size. By comparing Figure 3 with Figure 1, it can be seen that the southern Nebraska counties with the highest median ages also reported the smallest household sizes. Eleven counties had fewer than 2.5 persons per household. Among the lowest were Furnas, Garden, Dundy,

(continued on page 6)

Review and Outlook

Nebraska's real output increased in November compared to October. The physical volume index of the Nebraska economy increased 0.8 percent. This index is compiled by the College of Business Administration's Bureau of Business Research. Nebraska's physical volume index was 2.2 percent above the year's previous level.

The month-to-month increase was attributable entirely to agriculture. The index for this component of the Nebraska economy was up 10.8 percent, October-November. Cash farm marketings were estimated at $840 million for November 1981. On a seasonally adjusted basis, receipts were estimated at $650 million, up 7.9 percent from October. The November 1981 marketing of agriculture products was 37 percent ahead of the November 1980 level.

Prices, of course, remain depressed compared to one year ago. Nebraska agriculture prices received by farmers in November 1981 were 12.4 percent below year-earlier levels. A slight improvement was recorded October-November when prices received increased 4.2 percent. For comparison, agriculture prices nationally were down 10.7 percent November 1980-November 1981 and were unchanged over the interval October-November 1981. Prices paid increased 4.9 percent November 1980-November 1981.

Nebraska's nonagriculture sector declined 0.7 percent October-November 1981. Sectors declining include construction, manufacturing, and distribution. The government

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

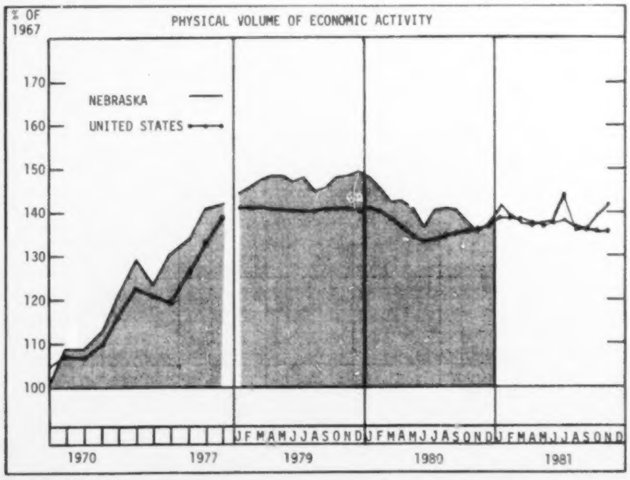
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

November 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	107.3	107.5	107.0	110.2
Agricultural	133.5	107.5	98.1	104.4
Nonagricultural	104.1	107.5	108.2	110.3
Construction	89.6	98.3	121.1	103.8
Manufacturing	103.8	105.4	108.2	110.1
Distributive	104.4	109.2	107.8	111.4
Government	107.0	107.7	106.8	108.5
Physical Volume	102.2	99.4	98.5	100.3
Agricultural	152.4	120.3	95.6	99.9
Nonagricultural	96.8	98.8	98.9	100.4
Construction	84.2	92.4	113.6	97.3
Manufacturing	99.7	98.5	99.8	100.5
Distributive	95.3	99.7	97.6	100.8
Government	101.2	98.1	100.0	99.1

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	372.3	358.4
Agricultural	384.5	344.3
Nonagricultural	370.2	358.9
Construction	223.7	306.6
Manufacturing	381.2	310.9
Distributive	382.3	393.2
Government	378.9	347.4
Physical Volume	140.2	135.5
Agricultural	155.1	141.7
Nonagricultural	137.9	135.3
Construction	67.6	92.6
Manufacturing	161.4	128.1
Distributive	136.2	140.1
Government	147.2	148.2

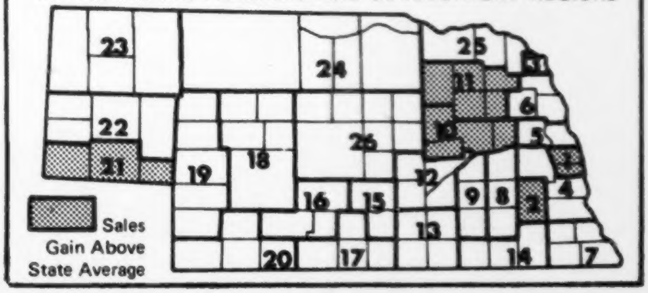


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Nov. 1981 as percent of Nov. 1980	Nov. 1981 as percent of Nov. 1980	Year to date'81 as percent of Year to date'80
The State	95.9	94.9	98.3
1 Omaha	99.3	99.3	101.2
Bellevue	98.8		
2 Lincoln	89.2	89.3	99.1
3 So. Sioux City	95.7	91.6	97.1
4 Nebraska City	95.8	90.9	95.2
5 Fremont	96.9	92.7	95.7
Blair	93.4		
6 West Point	86.9	81.8	91.5
7 Falls City	97.6	94.0	95.4
8 Seward	101.4	90.4	92.9
9 York	111.4	103.2	92.2
10 Columbus	121.0	105.0	99.6
11 Norfolk	95.5	92.0	98.5
Wayne	81.4		
12 Grand Island	88.7	88.7	93.6
13 Hastings	88.1	89.9	96.1
14 Beatrice	101.2	94.5	96.7
Fairbury	103.6		
15 Kearney	90.5	86.0	96.8
16 Lexington	101.2	94.7	94.6
17 Holdrege	108.5	100.6	96.2
18 North Platte	89.0	89.3	94.0
19 Ogallala	97.7	87.2	96.0
20 McCook	85.8	87.8	97.7
21 Sidney	94.4	95.8	100.1
Kimball	97.3		
22 Scottsbluff/Gering	93.7	88.3	96.1
23 Alliance	94.4	87.2	96.9
Chadron	91.1		
24 O'Neill	93.3	84.9	95.2
25 Hartington	90.2	80.6	93.8
26 Broken Bow	80.7	79.4	92.4

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

sector was unchanged. Output from Nebraska's nonagriculture sector has declined over the past two years. Over the past year, November 1980-November 1981, the index is down 3.2 percent, while over the past two years, November 1979-November 1981, the index is down 7.5 percent.

Output in Nebraska's construction industry slipped slightly in November when compared to October. The index was down 1.7 percent.

The manufacturing component of the index declined 2 percent October-November. The index in November 1981 stood at 161.4 (1967=100). This index had a double peak in April and July, declined sharply in August, recovered somewhat in September, then declined during the months of October and November.

The distributive trade index declined 0.3 percent. The November 1981 level is below the year-earlier level and that for 1979.

The government component of the index was unchanged at 147.2 percent. This sector is approximately 1 percent above 1980 and 1979 comparable levels.

Nebraska retail sales were up 0.9 percent on a dollar volume basis. When adjustments are made for price changes, real retail sales were down 5.1 percent November 1980-November 1981. The commodity component of the consumer price index increased 6.4 percent over the interval November 1980-November 1981.

Nonmotor vehicle sales were down 4.1 percent on a price-adjusted basis, while motor vehicle sales were down 16.9 percent on a price-adjusted basis. Total retail sales in November 1981 were approximately $751 million dollars, with $697 million representing nonmotor vehicle sales.

Cities with gains in real retail sales include Columbus, up 21 percent; Holdrege, up 8.5 percent; York, up 11.4 percent; Seward, up 1.4 percent; and Beatrice and Lexington, up 1.2 percent. Other major Nebraska trading points recorded decreases in real retail sales. Real retail sales were down 0.7 percent in Omaha and down more than 10 percent in Lincoln when November 1981 is compared with year-previous levels.

Nebraska employment in November 1981 was estimated at 755,000, up more than 2,000 from November 1980. Since the labor force expanded by more than 7,000 persons during the same interval, unemployment increased to more than 33,000. Nebraska's unemployment rate for November 1981 was estimated at 4.3 percent, less than half the national rate of 8.4 percent. Nebraska November data are, of course, subject to revision. Preliminary January 1982 data indicate a slight rise in employment and a sharp rise in unemployment compared to January 1981.

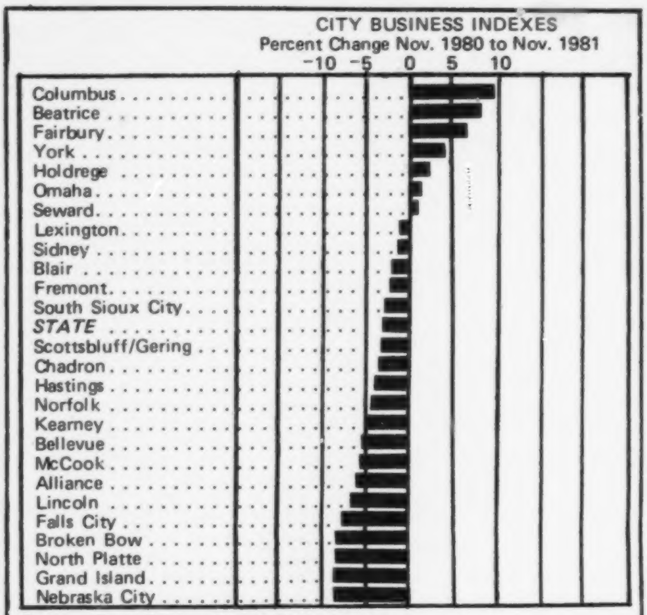
D. E. P.

5. PRICE INDEXES

November 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	280.7	109.6	110.5
Commodity component	258.0	106.4	108.6
Wholesale Prices	295.5	105.9	108.8
Agricultural Prices			
United States	243.0	89.3	104.2
Nebraska	248.0	87.6	102.8

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.



CITY BUSINESS INDEXES
Percent Change Nov. 1980 to Nov. 1981

Source: Table 3 (page 4) and Table 4 below.

4. NOVEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	102.5	62.6	96.4
Alliance	97.5	60.9	95.4
Beatrice	101.9	341.0	93.7
Bellevue	104.0	23.2	96.4
Blair	102.7	93.2	91.7
Broken Bow	102.5	83.0	103.5
Chadron	102.2	84.8	83.0
Columbus	102.2	73.6	96.1
Fairbury	101.5	217.2	100.3
Falls City	102.1	20.8	96.3
Fremont	101.8	70.0	101.1*
Grand Island	102.0	35.3	96.4
Hastings	101.2	114.9	109.7
Holdrege	101.9	51.8	129.0
Kearney	101.5	73.9	113.3
Lexington	102.6	56.5	165.2
Lincoln	102.6	47.4	92.2
McCook	102.0	89.9	98.1
Nebraska City	99.5	22.8	95.2
Norfolk	101.0	56.4	100.0
North Platte	100.1	45.1	99.2
Omaha	104.0	85.7	95.1
Scottsbluff/Gering	107.4	45.1	76.2
Seward	103.2	66.3	100.3
Sidney	100.5	117.9	104.0
So. Sioux City	100.1	84.6	104.5
York	103.2	59.2	110.3

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

Pawnee, Jefferson, Franklin, and Richardson.

Only three counties averaged more than 3.0 persons per household: Sarpy, Stanton, and Thurston. Most of the other counties with relatively large household sizes also were located in the eastern one-third of the state.

Another characteristic obtained from the 1980 census and presented in Table 1 is the median value of owner-occupied housing units. Statewide the median value was $38,000, with a low of $11,100 in Blaine County and a high of $48,000 in Sarpy County. Caution should be used in interpreting these values, however, because the values were not market prices but were listed by the owners. The possibility of underestimation exists if a house was purchased several years ago.

In general, counties with relatively high housing values were more populous and had younger population and larger household sizes than the counties with low housing values. They also were growing in population and were experiencing net inmigration. Fourteen counties recorded median housing values which were higher than the state average. Among the highest in this group were Lancaster, Buffalo, Lincoln, Hall, and Box Butte.

Figure 4 presents a geographic comparison of housing values. Looking at this map, a pattern like the three previous figures emerges—the clustering of similar values in Nebraska's southern counties. Housing values in this group of counties were among the lowest in the state. Other counties with low housing values were located in the sparsely populated counties in the central and western portion of Nebraska and along the Missouri River in the northeast. Nine counties had median housing values less than $20,000: Blaine, Pawnee, Arthur, Grant, Boyd, Greeley, Loup, Franklin, and Wheeler.

J. A. D.

Figure 3
PERSONS PER HOUSEHOLD

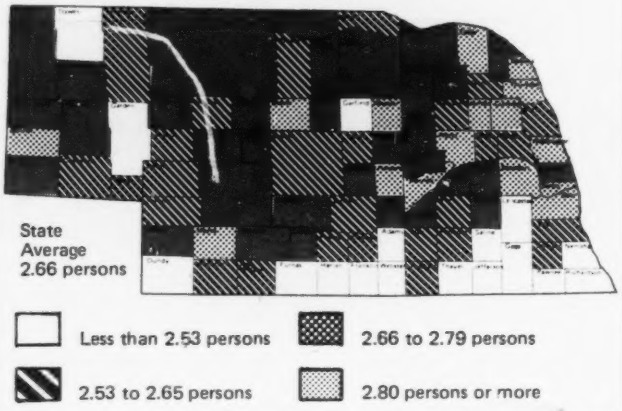
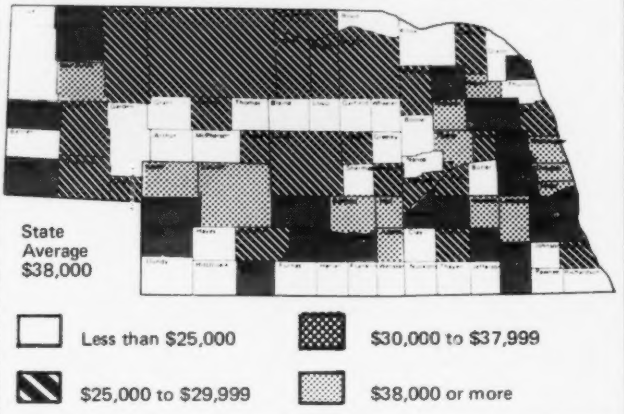


Figure 4
MEDIAN VALUE OF OWNER-OCCUPIED HOUSING UNITS



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AMA TO SPONSOR INDUSTRIAL MARKETING SEMINAR

"Industrial Marketing in Today's Competitive Environment" will address the problems and opportunities facing businesses in an era of supply-side economics. This one-day seminar will be held on Thursday, April 15, 1982, at the Peter Kiewit Conference Center, 1313 Farnam Street, Omaha.

For more information, including registration fees, contact Ronald Sagehorn, seminar chairman, Union Pacific Railroad, Omaha, Nebraska (402) 271-4005.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

ELECTRICITY CONSUMPTION IN NEBRASKA: 1960-1980

When it comes to the production and distribution of electricity in Nebraska, this state is unique. Nebraska is the only state in the nation which supplies its citizens with electrical power entirely from public and cooperatively owned utility firms. The origin of public power dates back to the 1930s. Today, urban as well as rural consumer electric rates in Nebraska are among the lowest in the nation.

TOTAL ELECTRICAL CONSUMPTION

During 1960, sales of electricity to ultimate consumers in Nebraska amounted to approximately 4,065 million kilowatt-hours (KWHs) (see Table 1). By the end of 1970 this consumption had increased to 9,757 million KWHs per year. The increase for the ten-year period was 140 percent. Compounded on an annual basis, this results in a 9.15 percent growth rate from 1960 to 1970.

By 1980, total consumption of electricity in Nebraska had increased to about 14,002 million KWHs. The increase from 1970 to 1980 was 44 percent. Compounded on an annual basis, this indicates a 3.68 percent growth rate from 1970 to 1980 (see Figure 1, p. 2). For the entire historical period from 1960 to 1980, the annual compounded growth rate of electrical consumption was 6.38 percent (see Figure 2, p. 3).

These data show a large reduction in the annual growth rate in the 1970s compared to the 1960s. The energy "crisis" is frequently cited as the major cause for this reduction. Electricity prices during the 1970s have been increasing more rapidly than the general price level. When we disaggregate the 1970s, however, the data indicate a growth rate of 3.44 percent from 1970 to 1975. From 1975 to 1980 the growth rate was 3.92 percent. This indicates that during the 1975 to 1980 time period, consumption of electricity has, once again, been increasing more rapidly than during the first half of the decade.

Beginning in 1973, higher prices for electricity appear to have effectively curbed demand by

(continued on page 2)

Table 1
ELECTRICAL CONSUMPTION
(millions of kilowatt-hours)

Year	Total I	Residential II	Commercial III	Industrial IV	Irrigation V
1960	4,065	1,907	1,247	866	45
1961	4,427	2,082	1,384	902	59
1962	4,789	2,221	1,560	969	39
1963	5,221	2,442	1,710	985	84
1964	5,534	2,607	1,839	1,004	84
1965	6,023	2,816	1,997	1,139	71
1966	6,098	2,850	1,975	1,175	98
1967	6,101	2,816	2,017	1,158	110
1968	7,391	3,099	2,517	1,641	134
1969	8,916	3,682	3,194	1,890	150
1970	9,757	4,107	3,469	1,946	235
1971	10,271	4,308	3,734	1,971	258
1972	9,936	4,081	3,712	1,900	243
1973	10,703	4,436	3,924	2,065	278
1974	10,951	4,512	3,797	2,240	402
1975	11,552	4,693	3,641	2,776	442
1976	12,081	4,722	3,797	2,993	569
1977	12,414	4,859	3,937	3,211	407
1978	13,339	5,326	4,079	3,420	514
1979	13,604	5,241	4,120	3,834	409
1980	14,002	5,497	4,182	3,713	610

Source: Columns II through IV: Department of Energy, *State Energy Report* and *Monthly Energy Data Report.*
Column V: USDA – Rural Electric Association, *Annual Statistical Report.*

(continued from page 1)

commercial consumers and, to a lesser extent, residential consumers. Higher prices had little impact, however, upon industrial and irrigation consumers of electricity. Annual growth rates in demand for electricity were:

	1960-1973	1973-1980
Residential	6.72%	3.11%
Commercial	9.22	0.91
Industrial	7.00	8.93
Irrigation	14.95	11.92

The commercial sector's electrical growth rate decreased dramatically between 1973 and 1980. Also, during this time frame, the residential sector's electrical growth rate declined to about one-half the rate it was from 1960 to 1973. Irrigation's growth rate of electricity remained relatively high and shows a moderate decline for 1973-1980 compared to 1960-1973. The industrial sector's growth rate, on the other hand, indicates a sizable increase.

RESIDENTIAL SECTOR

The residential sector consists of the aggregate of all types of housing units. Sales of electricity to ultimate consumers in the residential sector in Nebraska during 1960 was 1,907 million KWHs (see Table 1). By the end of 1970, consumption had increased to 4,107 million KWHs. The 115 percent increase results in an annual compounded growth rate of 7.97 percent during this ten-year period.

At the end of 1980, electrical consumption in the residential sector had increased to 5,497 million KWHs. From 1970 to 1980, consumption had increased 34 percent. Compounded on an annual basis, this indicates a 2.96 percent growth rate of electrical consumption.

The electrical consumption growth rate from 1970 to 1975 was 2.70 percent and from 1975 to 1980 it was 3.21 percent. In the residential sector, the growth rate of electrical consumption is about 0.5 percent higher from 1975 to 1980 than it was from 1970 to 1975.

When retail electricity prices in the residential sector are weighted by customers served, the average price per KWH paid by Nebraskans in 1980 was about 4.50 cents. This price is for residences consuming 1,000 KWHs per month. The average price per KWH for actual consumption in the residential sector of the entire United States and the District of Columbia was 5.36 cents per KWH. The average price per KWH for Nebraska in 1980 was approximately 16 percent less than the national average.

In terms of distribution of total electricity consumption over the years, the residential sector has shrunk in size. In 1960 this sector accounted for 46.9 percent of the total usage (see Figure 3, p. 6). By 1980, the residential sector consumed 39.3 percent of the total.

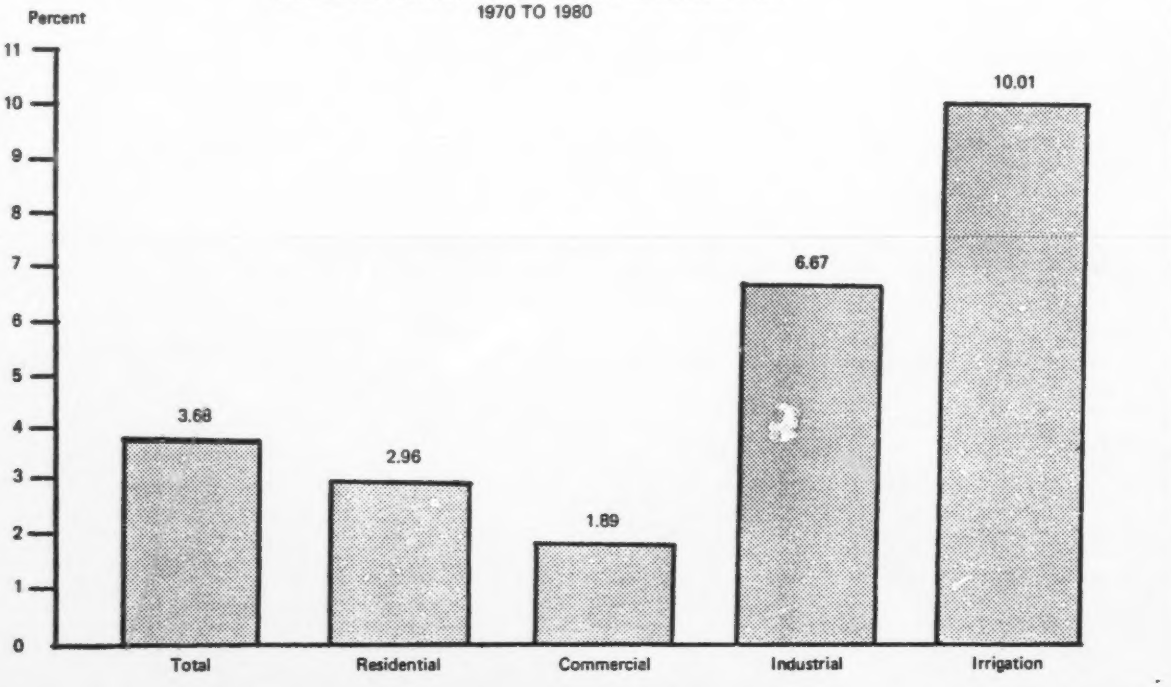
COMMERCIAL SECTOR

The commercial sector includes the aggregate of retail and wholesale trade; finance, insurance, real estate; service; transportation, communication, and utilities; and government.

Consumption of electricity to ultimate consumers in the commercial sector in Nebraska during 1960 was 1,247 million KWHs (see Table 1). By the end of 1970, sales had increased to 3,469 million KWHs. The 178 percent increase indicates an annual compounded growth rate of 10.77 percent for this ten-year period,

By 1980, electrical usage in the commercial sector had increased to 4,182 million KWHs. From 1970 to 1980, usage had increased 21 percent. Compounded on an annual basis, this results in a 1.89 percent growth rate of electrical usage for the 1970s.

Figure 1
ANNUAL GROWTH RATE OF ELECTRICAL CONSUMPTION
1970 TO 1980



Between 1970 and 1975, usage of electricity in this sector decreased dramatically. For this five-year period the growth rate had decreased to 0.97 percent. From 1975 to 1980, the KWH usage growth rate was 2.81 percent. The rate of increase for electricity in the commercial sector was 1.84 percent larger for the last half of the 1970s than for the first half of the decade.

The commercial sector did not change very much in terms of percentage of total consumption of electricity in Nebraska. In 1960 this sector accounted for 30.7 percent of total KWH consumption, and in 1980 it accounted for 29.9 percent (see Figure 3).

INDUSTRIAL SECTOR

The U.S. Department of Energy defines the industrial sector as the aggregate of construction, manufacturing, mining, and agriculture. Irrigation is relatively important in Nebraska, and farmers use electricity as energy for running water pumps and irrigation systems. Therefore, the portion of electricity used for irrigation is subtracted from the industrial sector and is reported as a separate sector.

Sales of electricity in the industrial sector (with KWHs consumed by irrigation subtracted out) in Nebraska during 1960 was 866 million KWHs (see Table 1). By the end of 1970, consumption had increased to 1,946 million KWHs. This 125 percent increase results in an annual compounded growth rate of 8.43 percent for this ten-year period.

By the end of 1980, electrical consumption in this sector had grown to 3,713 million KWHs. From 1970 to 1980, consumption had increased 91 percent. Compounded on an annual basis, this indicates a 6.67 percent growth rate of electrical usage for industry.

The electrical consumption growth rate from 1970 to 1975 was 7.36 percent and from 1975 to 1980 was 5.99 percent. The industrial sector differed from the residential or commercial sector in that its annual growth rate from 1975 to 1980 was lower than for the period from 1970 to 1975. The growth rate was 1.37 percent less for the last half of the 1970s than for the first half.

The industrial sector consumed a larger proportion of total KWH usage in Nebraska in 1980 than it did in 1960. During 1960 this sector consumed 21.3 percent of all KWHs consumed in the state (see Figure 3). By 1980, the industrial sector's proportion had increased to 26.4 percent.

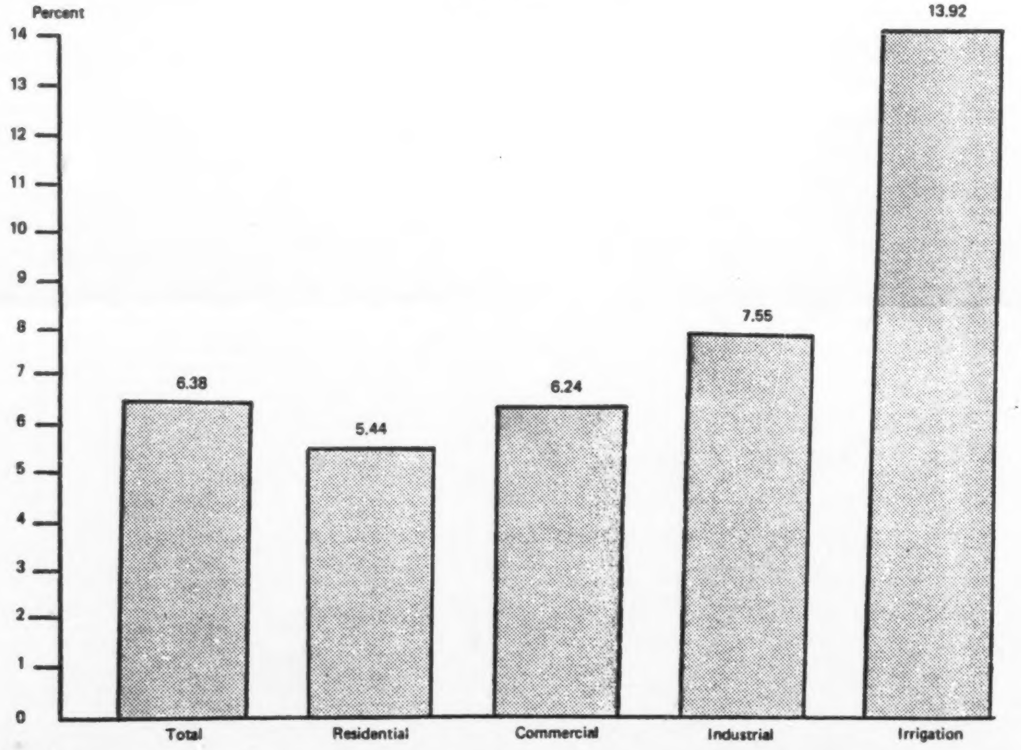
IRRIGATION SECTOR

Electrical energy consumption by irrigation has grown relatively rapidly in Nebraska over the past two decades. Sales of electricity to farmers for irrigation purposes in 1960 were only 45 million KWHs (see Table 1). By the end of 1970, consumption in this sector had increased to 235 million KWHs. This 422 percent increase indicates an annual compounded growth rate of 17.97 percent for the ten-year period.

By the end of 1980, electrical consumption for irrigation had increased to 610 million KWHs. From 1970 to 1980, consumption had increased 160 percent. Compounded on an annual basis, this indicates a compounded growth rate of about 10 percent.

The electrical consumption growth rate by irrigation from 1970 to 1975 was 13.47 percent, and from 1975 to 1980 it was 6.66 percent. This shows that the (continued on page 6)

Figure 2
ANNUAL GROWTH RATE OF ELECTRICAL CONSUMPTION
1960 TO 1980



Review and Outlook

The Nebraska economy recorded an increase of 1.3 percent in December 1981, according to the net physical volume index. The December 1981 results are somewhat misleading, since the index was boosted by substantial marketing of agriculture commodities. Despite the depressed prices, the volume of marketings was large and resulted in boosting the agriculture component of the physical volume index.

The agriculture component of the index was up 12.8 percent November-December 1981. On a year-to-year basis, cash farm marketings were up $19.8 billion, or 2.8 percent above the December 1980 level. For December 1981, cash farm marketings in Nebraska totaled $732 million.

Agriculture prices continued to decline in Nebraska and nationally. On a seasonally adjusted basis November-December 1981, agriculture prices received in Nebraska were down 4.4 percent, compared with 3.7 percent nationally. Taking a longer view, prices were down 12.9 percent December 1980-December 1981 in Nebraska and down 13 percent in the United States.

The nonagriculture sector declined 0.7 percent, and is probably more reflective of conditions in the state than those increased by the agriculture component of the index. The construction component declined 1.1 percent November-December 1981. Construction activity as measured by the net physical volume index declined since March 1981. The index recovered from the June 1980 lows through March 1981, but

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

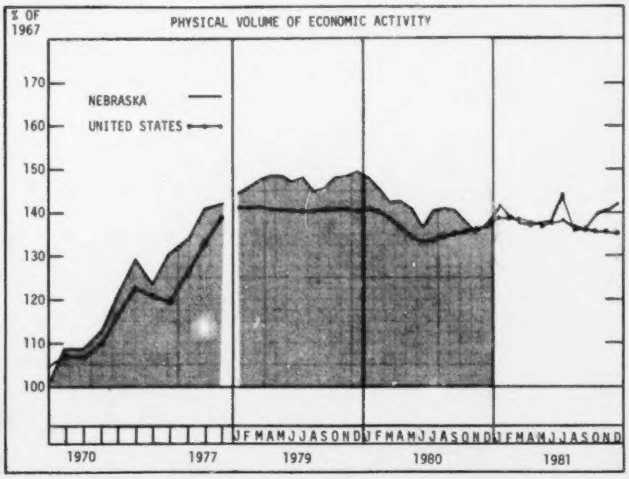
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

December 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	105.8	106.0	106.9	109.8
Agricultural	124.6	99.8	100.5	104.0
Nonagricultural	103.2	106.2	107.8	110.0
Construction	82.3	95.5	117.3	103.1
Manufacturing	98.6	102.2	107.4	109.4
Distributive	105.2	108.6	107.6	111.2
Government	107.2	107.6	106.9	108.4
Physical Volume	101.6	98.5	98.8	100.2
Agricultural	143.0	114.7	99.6	101.1
Nonagricultural	96.2	98.0	98.7	100.2
Construction	77.1	89.5	110.2	96.6
Manufacturing	94.5	95.9	99.4	100.1
Distributive	96.6	99.7	97.5	100.7
Government	101.9	98.3	100.2	99.0

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	375.5	358.1
Agricultural	414.6	354.9
Nonagricultural	369.4	358.2
Construction	224.0	312.1
Manufacturing	363.8	306.9
Distributive	384.5	393.4
Government	387.5	349.0
Physical Volume	142.1	135.1
Agricultural	175.0	151.0
Nonagricultural	137.0	134.6
Construction	66.9	93.2
Manufacturing	154.2	126.2
Distributive	136.6	139.7
Government	149.8	148.6



3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Dec. 1981 as percent of Dec. 1980	Dec. 1981 as percent of Dec. 1980	Year to date'81 as percent of Year to date'80
The State	95.4	94.9	97.9
1 Omaha	94.3	95.6	100.5
Bellevue	110.4		
2 Lincoln	92.0	91.6	98.3
3 So. Sioux City	109.4	102.7	97.6
4 Nebraska City	95.4	90.6	94.8
5 Fremont	102.5	98.7	96.0
Blair	106.6		
6 West Point	102.3	93.4	91.7
7 Falls City	105.8	99.6	95.8
8 Seward	92.1	95.6	93.2
9 York	94.3	90.1	92.0
10 Columbus	80.2	81.7	97.6
11 Norfolk	100.5	96.5	98.3
Wayne	101.1		
12 Grand Island	96.9	94.5	93.6
13 Hastings	88.1	90.0	95.4
14 Beatrice	96.3	94.2	96.4
Fairbury	98.2		
15 Kearney	95.5	94.5	96.5
16 Lexington	101.2	94.8	94.6
17 Holdrege	110.4	99.1	96.5
18 North Platte	93.2	91.5	93.7
19 Ogallala	105.0	101.2	96.4
20 McCook	110.3	100.7	97.9
21 Sidney	117.1	105.0	100.5
Kimball	96.5		
22 Scottsbluff/Gering	107.6	95.5	96.0
23 Alliance	109.8	100.5	97.2
Chadron	104.1		
24 O'Neill	99.5	87.4	94.4
25 Hartington	83.2	81.9	92.5
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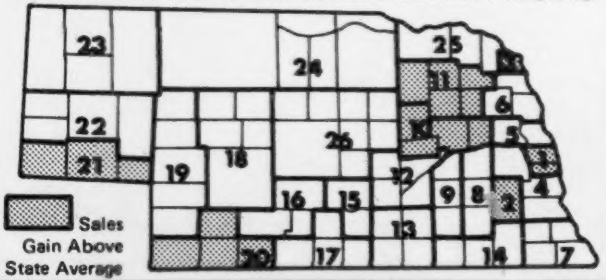
*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

has declined since the March peak.

The manufacturing component of the index recorded a 4.5 percent decrease November-December 1981. This is the largest percentage decrease in the index during the past three years. In December 1981 the index was about 5 percent below the corresponding level in 1980 and approximately 10 percent below the December 1979 level. Most of the deterioration in the Nebraska manufacturing economy occurred during the third and fourth quarters of 1981.

The distributive trade component and government component of the index recorded increases. The distributive trade recorded a 0.2 percent increase November-December 1981, while government recorded an increase of 1.4 percent. The index for distributive trade in December 1981 was well below the 1980 and 1979 levels. The index for the government component is sometimes difficult to interpret in Nebraska because electricity is included in the public sector.

Nebraska retail sales in December 1980 recorded a slight gain—0.6 percent—above the December 1980 level. Nationally, retail sales were up 4.9 percent during the same period. When retail sales are adjusted for price changes, Nebraska retail sales were down 5.1 percent in real terms, while sales were down 1 percent in real terms nationally. The commodity component of the Consumer Price Index continues to record lower rates of price increases. December 1981 compared with one year previous indicates a price increase of 6.0 percent.

Motor vehicle sales were more adversely affected by the economy than nonmotor vehicle sales. Comparing December 1981 with December 1980, motor vehicle sales on a price-adjusted basis (real) were down 12.3 percent. Nonmotor vehicle sales on a price-adjusted basis (real) over the same period were down 4.6 percent. Motor vehicle sales in Nebraska in December 1981 were estimated at $55 million, while nonmotor vehicle sales were estimated at $902 million. The 1980 December values were $60 million for motor vehicles and $892 million for nonmotor vehicles.

For 1981, total motor vehicle sales were estimated at $844 million. This compares with a total of $821 million in 1980. Nonmotor vehicle sales were estimated at $8.6 billion in Nebraska in 1981 compared with $8.1 billion in 1980. When adjusted for price changes, both motor vehicle and nonmotor vehicle sales of course were down.

Despite the general weakness in the state's economy, there are some areas which managed to record gains. Information in Table 3 indicates that Bellevue, Fremont, Blair, West Point, Falls City, Norfolk, Wayne, Lexington, Holdrege, McCook, Sidney, Scottsbluff-Gering, Alliance, and Chadron managed to record real gains in retail sales.

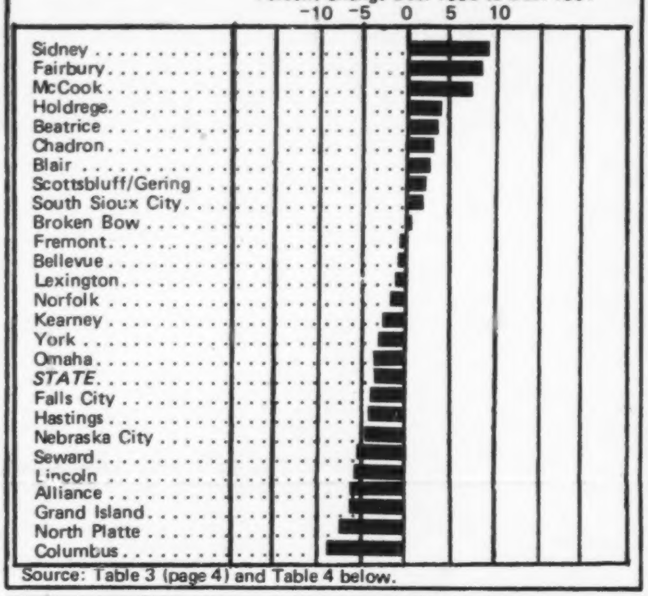
D. E. P.

5. PRICE INDEXES

December 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	281.5	108.9	110.3
Commodity component	258.4	106.0	108.4
Wholesale Prices	295.9	105.4	108.5
Agricultural Prices			
United States	235.0	87.0	102.7
Nebraska	237.0	87.1	101.4

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change Dec. 1980 to Dec. 1981



Source: Table 3 (page 4) and Table 4 below.

4. DECEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	102.6	55.5	99.7
Alliance	83.9	54.0	90.3
Beatrice	102.7	244.3	103.7
Bellevue	103.9	24.1	96.6
Blair	103.4	73.5	100.9
Broken Bow	103.0	116.8	97.6
Chadron	106.3	76.0	94.2
Columbus	103.1	77.8	102.6
Fairbury	102.5	467.6	101.3
Falls City	103.2	18.9	93.9
Fremont	102.9	58.6	122.3*
Grand Island	102.7	30.8	98.7
Hastings	102.2	97.3	120.5
Holdrege	102.8	69.9	97.6
Kearney	102.2	71.0	100.2
Lexington	103.1	48.7	99.0
Lincoln	103.5	49.8	100.2
McCook	102.6	133.5	93.0
Nebraska City	99.9	59.9	95.6
Norfolk	101.7	56.3	96.8
North Platte	100.3	45.5	96.8
Omaha	103.9	54.7	100.0
Scottsbluff/Gering	106.3	49.8	88.7
Seward	103.9	48.3	103.0
Sidney	101.1	114.6	94.8
So. Sioux City	100.3	72.2	102.5
York	104.0	55.2	100.2

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

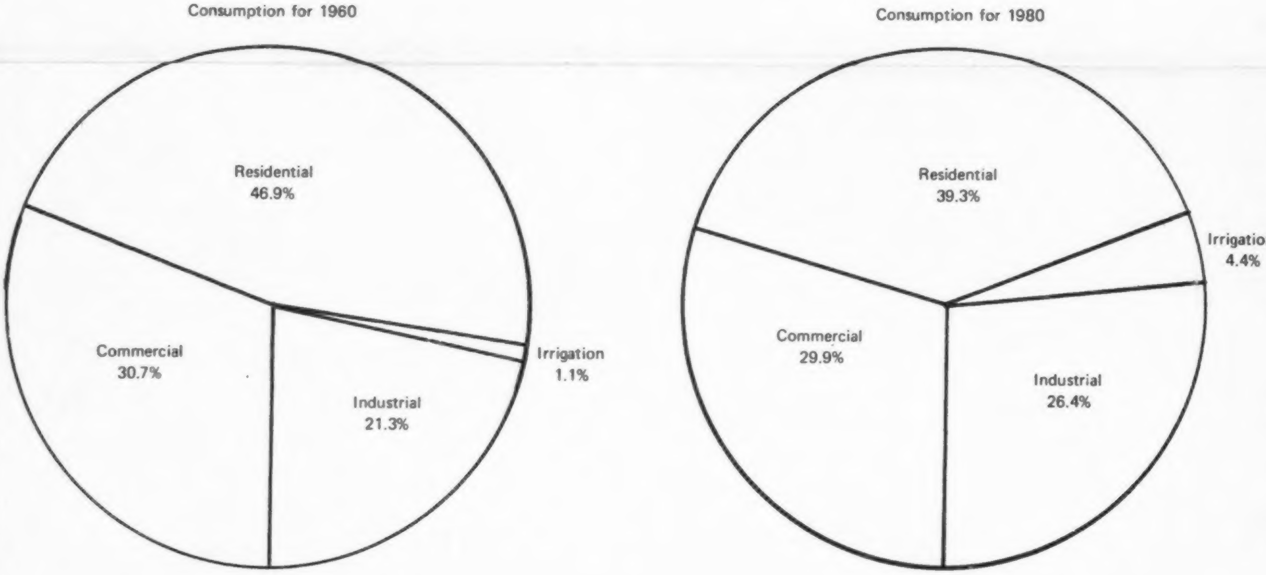
annual growth rate of electrical usage for irrigation has dropped off dramatically from 1975 to 1980 compared to the previous five years. The decrease in the growth rate was 6.81 percent annually. However, during 1975 to 1980, the irrigation sector continued to lead all other sectors in the annual growth rate of electrical consumption.

For the past twenty-one years, electrical consumption for irrigation has experienced high growth. Electrical consumption in 1960 was 45 million KWHs. By the end of 1980, electrical consumption for irrigation had increased to 610 million KWHs. This 1,256 percent increase for the twenty-one-year period indicates an annual compounded growth rate of 13.92 percent.

The irrigation sector continues to consume a relatively small proportion of total KWH usage in Nebraska. In 1960, this sector accounted for 1.1 percent of all KWHs consumed in Nebraska. By 1980, the irrigation sector's proportion had increased to 4.4 percent.

C. P. D.

Figure 3
DISTRIBUTION BY SECTOR OF TOTAL KILOWATT-HOUR CONSUMPTION FOR NEBRASKA



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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

A PROFILE OF NEBRASKA'S SERVICES INDUSTRY

In terms of employment, the fastest growing industry in both Nebraska and the nation as a whole is the services industry. During the past two decades, employment in Nebraska's services industry increased 109 percent, while employment in all other nonagricultural industries of the state increased only 57 percent (Table 1). This trend is indicative of the transition from a goods-producing economy to a services-oriented economy that has occurred in this country since the end of World War II. In 1948, employees in the goods-producing industries (construction, manufacturing, and mining) comprised 42 percent of nonfarm payroll employment, nationally. By 1980, this percent had shrunk to 29 percent, and the outlook is for even further declines in the share of nonagricultural employment for the goods-producing industries.

The services-producing sector is the aggregate of the following nonagricultural industries: wholesale and retail trade; transportation, communications, and public utilities; finance, insurance, and real estate; government; and services. This article focuses on the services industry in Nebraska by presenting growth trends for employment, Gross State Product, and personal income. For selected services, data from the U.S. Census Bureau's quinquennial censuses of selected service industries are compared in an effort to underline where major changes have occurred within the industry.

The services industry includes activities such as health, education, social and personal services, business services, repair, and entertainment. Other than for trade and government, services employs the greatest number of people in Nebraska. In 1960, the services industry accounted for 14.5 percent of total nonagricultural employment in the state. By 1980, the industry's share of nonagricultural employment had risen to 18.5 percent, a gain surpassing all other Nebraska industries. The only other industry exhibiting an increase in its share of nonagricultural employment comparable to that of services was wholesale and retail trade. Percentage shares of nonagricultural employment in Nebraska for the years 1960 and 1980 are presented in Table 2. As the data indicate, the goods-producing industries in Nebraska decreased their share of total nonagricultural employment from 24.6 percent in 1960 to 20.3 percent in 1980, reflecting the trend that has occurred nationally.

It has been suggested by some economists that the services industry exerts a stabilizing influence on the remainder of the economy during recessionary periods. Although it is beyond the scope of this article to prove such a contention, examination of employment data from the Nebraska Department of Labor is enlightening. For purposes of comparison, annual employment levels in services and in the aggregate of other nonagricultural industries from 1970 through 1981 are expressed as a percent of 1970 levels and presented graphically in Figure 1 (p. 2). During both the 1974-75 recession and the present economic downturn, employment in the services industry continued its historical trend of positive growth. However, employment in the aggregate of other nonagricultural industries declined during both downturns. Data from the Bureau of Labor Statistics of the U.S. Department of Labor indicate that, nationally, employment in the services industry has reduced the percentage decline in total employment during economic downturns by a fairly constant amount over time. These occurrences lend support to the argument that a decline in total employment during a recession is reduced by the upward growth of employment in the services industry. Although its impact on the overall economy is debatable, the data indicate that employment in the services industry is somewhat immune to the effects of a recession. However, this statement needs to be qualified. Although employment in the services industry has maintained a positive growth pattern

(continued on page 2)

Table 1
NEBRASKA EMPLOYMENT
1960, 1965, 1970, 1975, AND 1980

	Number of employees (thousands)				
	1960	1965	1970	1975	1980
Services	*55.4*	*67.3*	*82.9*	*100.2*	*116.0*
All Other Nonagricultural	325.7	348.6	399.2	457.5	511.5

Source: Nebraska Department of Labor.

Table 2
PERCENTAGE COMPOSITION OF NONAGRICULTURAL
EMPLOYMENT IN NEBRASKA, 1960 AND 1980

	Percent	
Industry	1960	1980
Manufacturing	17.53	15.36
Construction	6.40	4.62
Mining	0.71	0.29
Wholesale and Retail Trade	24.56	26.07
Transportation, Communication, and Public Utilities	9.87	7.60
Finance, Insurance, and Real Estate	5.93	6.71
Services	14.54	18.49
Government	20.47	20.86

Source: Nebraska Department of Labor.

/

(continued from page 1) during recessionary periods, the rate of growth has slowed. Also, unemployment associated with the industry is higher in times of recession. In general, this is not because of slack in the services industry, but stems from a reentrance of workers into the labor force.

The percentage distributions of employment within the services industry for both Nebraska and the nation as a whole during 1980 are presented in Table 3. During the past two decades, the extraordinary growth in the services industry has been concentrated primarily in the health and business services. For Nebraska, health and business services comprise about 50 percent of employment within the industry. It is worth noting that health services employment in the state accounts for a considerably larger share of total services employment than for the nation as a whole. With two medical schools (each with a fully staffed hospital) and a greater-than-average number of nursing home beds and hospital beds per 1,000 population, the demand for health services personnel in Nebraska has been relatively strong, and is expected to remain so during the present decade.

Two other measures of regional economic activity useful for purposes of comparison are Gross State Product (output) and personal income. Gross State Product by industry is the regional analogue of Gross National Product, and measures the dollar value of all goods and services produced by an industry during a specified period of time; it reflects the net result of economic activity in an industrial sector. At the regional level, nothing exists that is comparable to the National Income and Product Accounts of the United States. Consequently, the Bureau of Business Research estimates Gross State Product using a variation of the Kendrick-Jaycox technique.[1] This estimated output series for Nebraska is a proxy for a Gross State Product series that would be prepared in the same fashion as Gross National Product. Real Gross State Product is obtained by adjusting current dollar output for price changes, and more accurately reflects economic growth in an industrial sector. During the period from 1960 through 1980, real output for services increased 105 percent, slightly more than the 98 percent increase registered by the aggregate of other nonagricultural industries in Nebraska. Compared to other industrial sectors, services is not a high-output industry when employment is factored in. Growth of output for the services industry during the past two decades has just kept pace with the growth in employment for the industry. However, the growth in real output for the aggregate of other nonagricultural industries has been almost twice as great as that of employment in these industries. Consequently, output per employee in the services industry is much lower than the comparable figure for the other nonagricultural industries. In 1980, real output per employee in services amounted to $8,795, whereas real output per employee in all other nonagricultural sectors was $15,926. Since output for an industry is estimated using personal income, output per employee for the services industry is indicative of the relatively low wage rates that prevail in this industry.

Although it does not cover all economic activity of an industry, personal income is a commonly used measure of economic growth for a region. Personal income is estimated by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. The Regional Economic Information System of BEA prepares estimates for states, counties, and SMSAs. Personal earnings (often referred to as participation income) include wage and salary disbursements, proprietors income, and other labor income. It represents the earnings of all individuals that are producing the goods and services of an industry. When adjusted for price changes, real personal earnings (in 1972 dollars) yield an indication of the trend in output for an industry. From 1960 to 1980, personal earnings in current dollars increased 509 percent in the services industry, compared to a 379 percent increase for all other nonagricultural sectors. This greater increase in personal earnings for services is, in part, attributable to the industry's employment boom over the two-decade period. In real terms, personal earnings for the services industry grew from $399 million in 1960 to $926 million in

Figure 1
NEBRASKA EMPLOYMENT AS A PERCENT OF 1970 LEVELS

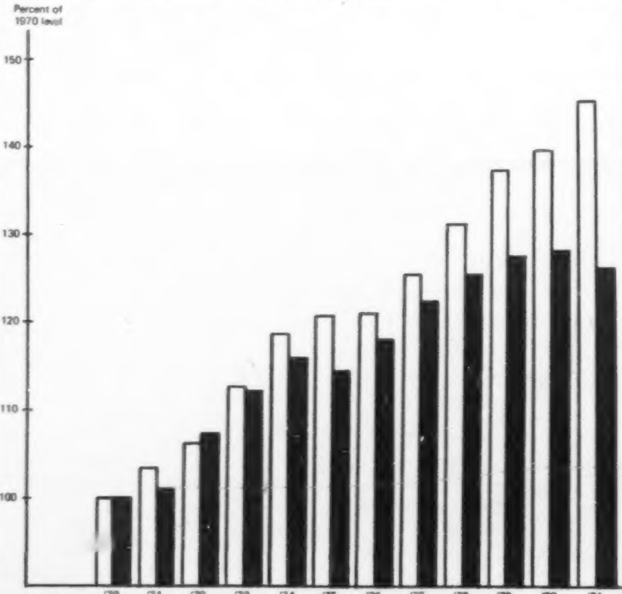

Table 3
PERCENTAGE DISTRIBUTION OF EMPLOYMENT
WITHIN THE SERVICES INDUSTRY, 1980

	Percent	
	Nebraska	U.S.
Hotels and Lodgings	5.7	6.0
Personal Services	5.3	5.2
Business Services	14.3	16.9
Automotive Repair and Garages	3.3	3.3
Amusement and Recreation	5.0	5.3
Health Services	35.9	29.5
Educational Services	7.3	6.3
Social Services	5.4	6.5
Membership Organizations	7.8	8.9
Other Services	10.0	12.1

Sources: Nebr. Dept. of Labor and U.S. Bureau of Labor Statistics.

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[1] John W. Kendrick and C. Milton Jaycox, "The Concept and Estimation of Gross State Product," *Southern Economic Journal* 32 (October, 1965), pp. 153-168.

1980, a 132 percent increase. Real personal earnings for the aggregate of other nonagricultural industries increased only 86 percent over the same time span. As with employment and Gross State Product, the services industry has outpaced the other nonagricultural industries in the growth of real personal earnings. Personal earnings and gross product for the services industry in Nebraska are summarized in Table 4.

CENSUSES OF SELECTED SERVICE INDUSTRIES

Beginning with the 1967 censuses, the U.S. Bureau of the Census conducts a comprehensive canvas of the nation's industrial and business activity. Such censuses were authorized by Congress, and are to be taken at five-year intervals, covering the years ending with "2" and "7." The first business census was conducted in 1810 as part of the decennial census of population, and the latest such census was completed in 1977. Business censuses are the primary source of facts about the structure and functioning of the economy, and are quite valuable as they provide a statistical profile of a large segment of the national economy. The objectives of this section are the presentation of highlights of the 1977 census and a comparison of the data with that of the previous census. In this manner, significant growth trends within the selected service industries can be recognized.

The *1977 Census of Services Industries* contains data on establishments for certain industrial classifications that are also subject to the federal income tax. In Table 5 these industries are identified by title and SIC code, and employment statistics from the last two business censuses are presented. Total paid employees (full- and part-time) in the selected service industries increased from 31,708 in 1972 to 40,101 in 1977, a gain of 26.5 percent. As indicated by the data, the greatest increases in employment over this five-year period were registered by business services, legal services, and miscellaneous repair services.

During 1977, the 14,801 establishments of the selected service industries realized total receipts of $976.3 million, an increase of 70.9 percent from the level of receipts recorded by the 1972 census. Adjusted for price changes, real business receipts (in 1972 dollars) increased 22.2 percent over the period (Table 6). Annual receipts averaged $65,961 per establishment in 1977 compared to $42,886 in 1972. Within industries, annual receipts for 1977 ranged from $25,035 per establishment for personal services to $221,499 for engineering, architecture, and surveying services (Table 7, p. 6). Business services receipts comprised the greatest share of total receipts of all establishments (23.9 percent).

The total payroll for 1977 was $280.0 million, up 82.7 percent from the 1972 level. For the 40,101 paid employees, this amounted to an annual average payroll of $6,982 per employee. The average payroll per employee ranged from $3,944 for amusement and recreation services, including motion pictures, to $16,035 for engineering, architecture, and surveying services. Payroll as a percent of an establishment's total receipts averaged 32.5 percent for all selected service industries. Within industries, payroll as a percent of receipts was 48.7 percent for engineering, architecture, and surveying services, 40.9 percent for business services, and 21.1 percent for automotive repair, services, and garages.

At the county level, Douglas County was the leader in terms of business receipts, accounting for 45.4 percent ($443.5 million) of total state receipts of selected service industries. Lancaster County ranked second with 15.5 percent ($151.3 million) of total business receipts, according to the 1977 census data. Other counties in Nebraska reporting business receipts for selected service industries in excess of $20 million were Hall ($30.2 million), Lincoln ($24.1 million), Sarpy ($20.7 million), Platte ($20.2 million), and Scotts Bluff ($20.1 million). Compared to the rest of the state, the levels of business receipts

(continued on page 6)

Table 4
GROSS PRODUCT AND PERSONAL EARNINGS
FOR THE SERVICES INDUSTRY IN NEBRASKA
1960, 1965, 1970, 1975, AND 1980

Year	Gross Product (millions of $)	Real Gross Product (millions of 1972 $)	Personal Earnings (millions of $)
1960	294	498	271
1965	395	574	358
1970	642	711	580
1975	1,063	484	920
1980	1,910	1,020	1,650

Sources: U.S. Department of Commerce and Bureau of Business Research computations.

Table 5
EMPLOYMENT IN SELECTED SERVICES INDUSTRIES
IN NEBRASKA, 1972 AND 1977

SIC Code	Industry	1972	1977	% Change 1972-77
701,3	Hotels, Motels, Trailering Parks, and Camps	4,870	6,463	32.7
72	Personal Services	6,634	6,338	-4.5
73	Business Services	8,046	12,798	59.1
75	Automotive Repair, Services, and Garages	2,577	3,477	34.9
76	Miscellaneous Repair Services	1,252	1,832	46.3
78,79	Amusement and Recreation Services, including Motion Pictures	4,745	4,178	-11.9
8072	Dental Laboratories	216	268	24.1
81	Legal Services	1,580	2,326	47.2
891	Engineering, Architecture, and Surveying Services	1,788	2,421	35.4

Sources: U.S. Bureau of the Census, *1977 Census of Service Industries, 1972 Census of Selected Service Industries,* and Bureau of Business Research computations.

Table 6
SELECTED SERVICE INDUSTRIES IN NEBRASKA
1972 AND 1977

	1972	1977	% Change 1972-77
Number of Establishments	13,319	14,801	11.1
Proprietors and Working Partners	10,291	12,573	22.2
All Employees	31,708	40,101	26.5
All Business Receipts (thousands of $)	571,200	976,295	70.9
Constant Dollar Business Receipts[1] (thousands of 1972 $)	571,200	697,852	22.2
Payroll Entire Year (thousands of $)	153,289	279,983	82.7

---

[1] Business receipts are deflated with the personal consumption expenditure implicit price deflator for services.

Sources: U.S. Bureau of the Census, *1977 Census of Service Industries, 1972 Census of Selected Service Industries,* and Bureau of Business Research computations.

Review and Outlook

The level of economic activity in Nebraska declined 2.2 percent as measured by the Bureau of Business Research's index of physical volume output. This month-to-month decrease in Nebraska's output in January 1982 is one of the largest monthly declines in recent months.

The December-to-January decrease in the state's economic activity was recorded in all sectors of the economy with the exception of construction, where a small increase was recorded. Agriculture and manufacturing had the largest monthly declines. It should be noted that January estimates are based upon revised data which result in significant alterations for some sectors. These changes are annual revisions required each year to calculate the indexes, especially the employment and cash farm marketing series. The indexes in Table 2 reflect these changes, including new seasonal adjustment factors, and are not directly comparable to data published in previous issues of *Business in Nebraska.* This annual update is designed to improve the accuracy of the measures.

The agriculture sector recorded a 9.2 percent decrease in net physical volume output. This decline follows substantial gains in cash farm marketing receipts during the fourth quarter 1981. On a seasonally adjusted basis, cash farm marketing receipts in Nebraska were down more than $73 million December-January. Compared with one year ago, January 1982 receipts were $36 million below the corresponding level for January 1981. Nebraska cash farm marketings went against

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

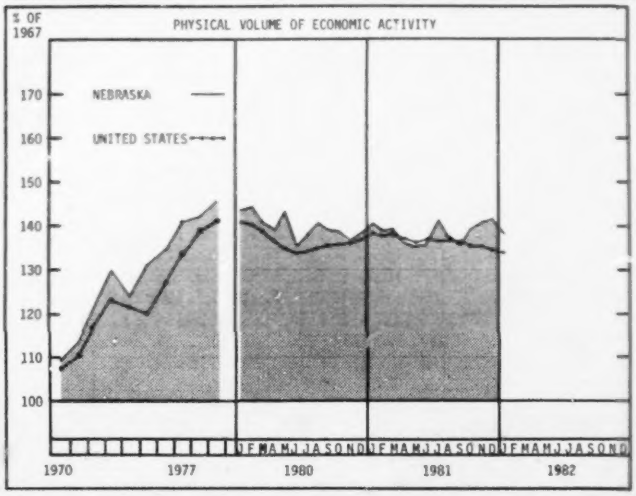
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

January 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.8	103.8	102.8	103.8
Agricultural	106.5	97.9	106.5	97.9
Nonagricultural	102.3	104.0	102.3	104.0
Construction	77.7	89.2	77.7	89.2
Manufacturing	98.2	99.7	98.2	99.7
Distributive	104.0	106.4	104.0	106.4
Government	108.7	107.7	108.7	107.7
Physical Volume	98.4	96.9	98.4	96.9
Agricultural	118.9	107.2	118.9	107.2
Nonagricultural	95.6	96.6	95.6	96.6
Construction	72.9	83.6	72.9	83.6
Manufacturing	94.6	94.8	94.6	94.8
Distributive	95.9	98.1	95.9	98.1
Government	101.8	98.0	101.8	98.0

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	368.3	357.1
Agricultural	367.6	358.2
Nonagricultural	368.2	357.0
Construction	227.2	307.6
Manufacturing	352.6	303.4
Distributive	387.8	393.0
Government	378.9	350.9
Physical Volume	138.2	133.9
Agricultural	153.2	147.4
Nonagricultural	135.9	133.4
Construction	67.2	91.0
Manufacturing	148.2	124.1
Distributive	137.3	139.1
Government	146.6	147.9

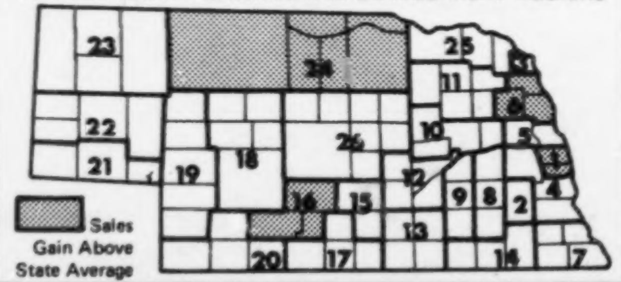


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Jan. 1982 as percent of Jan. 1981	Jan. 1982 as percent of Jan. 1981	Year to date'82 as percent of Year to date'81
The State	86.7	86.7	86.7
1 Omaha	96.9	94.5	94.5
Bellevue	79.1		
2 Lincoln	84.3	84.6	84.6
3 So. Sioux City	76.2	81.0	81.0
4 Nebraska City	80.7	80.8	80.8
5 Fremont	70.6	76.8	76.8
Blair	91.2		
6 West Point	81.0	91.0	91.0
7 Falls City	81.3	83.0	83.0
8 Seward	76.6	83.0	83.0
9 York	84.8	84.7	84.7
10 Columbus	53.8	65.0	65.0
11 Norfolk	82.7	85.1	85.1
Wayne	98.5		
12 Grand Island	77.6	76.6	76.6
13 Hastings	71.7	77.2	77.2
14 Beatrice	76.1	79.6	79.6
Fairbury	89.0		
15 Kearney	81.9	81.5	81.5
16 Lexington	85.8	89.0	89.0
17 Holdrege	72.0	79.9	79.9
18 North Platte	79.5	80.0	80.0
19 Ogallala	79.7	86.0	86.0
20 McCook	73.7	79.6	79.6
21 Sidney	83.1	86.0	86.0
Kimball	94.8		
22 Scottsbluff/Gering	74.7	76.0	76.0
23 Alliance	78.1	81.8	81.8
Chadron	80.7		
24 O'Neill	90.6	91.3	91.3
25 Hartington	77.5	86.1	86.1
26 Broken Bow	86.6	83.8	83.8

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals and city totals exclude motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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the national trend, where there was an increase of approximately 4 percent on a seasonally adjusted basis December 1981-January 1982. Prices received by Nebraska farmers dropped more than nationally, 10.4 percent in Nebraska January 1982 compared with 8.6 percent for the U.S.

The nonagriculture segments of the Nebraska economy declined 0.9 percent December 1981-January 1982. Construction recorded a small increase of 0.4 percent on a month-to-month basis, but remains extremely depressed.

Manufacturing recorded a 2.8 percent decrease, one of the largest decreases on a month-to-month basis in some time. The manufacturing output index moved erratically higher in 1981, peaking in July 1981. Declines in the state's manufacturing sector have been recorded monthly since July, with the exception of September. The manufacturing segment of the index is approximately 14 percent below the two year previous levels.

The distributive trade and the government sector recorded decreases of 0.5 percent December 1981-January 1982. The distributive trade sector also peaked in July 1981, and recovered only very slightly in the fourth quarter of 1981 before declining in January 1982. The government sector has shown little movement over the past several years.

Nebraska net taxable retail sales were estimated at $591.2 million in January 1982. This is approximately $55 million below January 1981 sales levels. On a dollar volume basis (unadjusted for price changes) retail sales declined 8.6 percent January 1982 compared with one year previous. On a price adjusted basis, real retail sales fell 13.3 percent. The commodity component of the Consumer Price Index increased 5.5 percent January 1981-January 1982, reflecting a continued slowdown in inflation.

The January 1982 retail sales figure shows a considerable drop irrespective of whether or not adjusted for price changes. Part of the January 1982 decline resulted from the fact that January 1981 was a strong month for retail sales, but this does not account totally for the substantial drop in sales in January 1982.

On a price adjusted basis, data in Table 3 indicate that retail sales for the state were approximately 86.7 percent of one year previous. Cities recording substantially better retail sales than the state average include Omaha, Blair, Wayne, and O'Neill. Sales on a price adjusted basis were down in all of these communities, although the decrease was less than that recorded in the state.

The city business indexes indicate the wide-spread nature of the recession across the state. Fairbury was the only city to record an increase on a year-to-year basis. For the state, the index was down 9.2 percent. Communities recording gains above the state average change include Omaha, Blair, Beatrice, and Kearney.

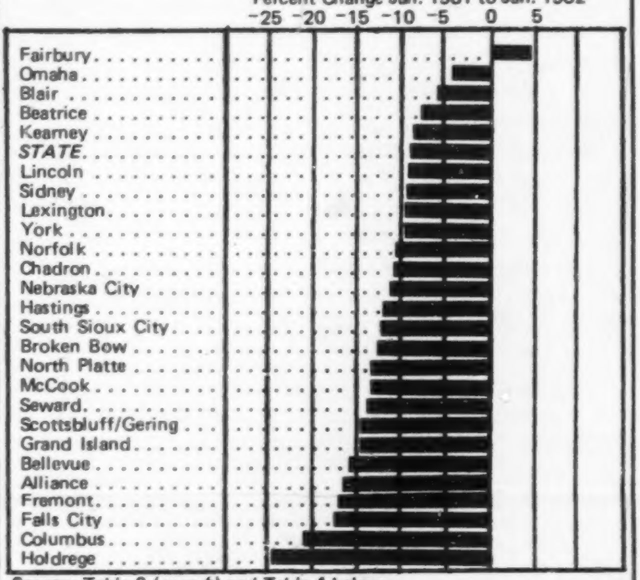
D. E. P.

5. PRICE INDEXES

January 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	282.5	108.4	108.4
Commodity component	258.8	105.5	105.5
Wholesale Prices	298.2	112.6	112.6
Agricultural Prices			
United States	243.0	91.4	91.4
Nebraska	240.0	89.6	89.6

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change Jan. 1981 to Jan. 1982



Source: Table 3 (page 4) and Table 4 below.

4. JANUARY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	99.5	52.5	118.6
Alliance	89.7	67.6	125.2
Beatrice	103.0	176.4	111.7
Bellevue	98.4	31.4	120.0
Blair	100.0	68.2	112.7
Broken Bow	82.4	115.2	119.5
Chadron	99.9	62.0	140.6
Columbus	100.3	73.7	129.0
Fairbury	99.8	751.3	124.4
Falls City	97.8	20.6	112.3
Fremont	100.6	48.6	107.9*
Grand Island	102.8	28.0	113.6
Hastings	104.7	73.5	149.4
Holdrege	73.6	86.1	127.2
Kearney	102.3	69.6	112.8
Lexington	101.2	43.6	110.2
Lincoln	100.9	57.4	117.8
McCook	90.5	160.4	115.5
Nebraska City	92.4	117.2	108.4
Norfolk	99.5	56.2	112.6
North Platte	99.5	42.0	105.9
Omaha	103.2	44.1	122.7
Scottsbluff/Gering	98.4	56.0	114.4
Seward	101.4	41.2	113.3
Sidney	96.8	91.3	122.1
So. Sioux City	102.1	59.4	116.3
York	98.8	58.9	125.5

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

in Douglas County and Lancaster County were high. For the 3,827 selected service industry establishments in Douglas County, receipts per establishment amounted to $115,898; the comparable figure for the 1,977 business establishments in Lancaster County was $76,505. In the other 91 counties of Nebraska, business receipts per establishment were $42,403. For purposes of comparison, the state-wide average receipts per establishment was $65,961, according to the 1977 census.

Among the cities of Nebraska with populations exceeding 2,500, Omaha and Lincoln led the way in total business receipts for selected service industries with 57.5 percent of the state total. Employees in selected service industries in Omaha and Lincoln were compensated at higher levels than their counterparts in the nonmetropolitan areas of Nebraska. During 1977, payroll per employee levels for Omaha and Lincoln were $7,839 and $6,725, respectively. In the nonmetropolitan areas of the state, payroll per employee was measured at $6,119, compared to a state-wide average payroll per employee for all establishments of $6,982.

C. L. B.

Table 7
SELECTED SERVICES INDUSTRIES IN NEBRASKA, 1977

	Receipts per Establishment ($)	Receipts as a Percent of Receipts of All Establishments	Payroll as a Percent of Receipts	Payroll per Employee ($)
Hotels, Motels, Trailering Parks, and Camps	161,051	10.3	28.7	4,267
Personal Services	25,035	12.9	35.3	5,593
Business Services	93,098	23.9	40.9	6,812
Automotive Repair, Services, and Garages	90,481	17.7	21.1	9,216
Miscellaneous Repair Services	42,411	7.8	29.0	8,995
Amusement and Recreation Services, including Motion Pictures	56,866	8.1	23.7	3,944
Dental Laboratories	103,672	0.7	45.1	10,474
Legal Services	89,379	10.2	26.2	9,950
Engineering, Architecture, and Surveying Services	221,499	8.4	48.7	16,035

Source: U.S. Bureau of the Census, *1977 Census of Service Industries.*

* * * * * * * * * * *

THE CPI: HOMEOWNERSHIP CHANGES AND POSTPONEMENT OF REBASING

On October 27, 1981, the Bureau of Labor Statistics announced its intention to change the way in which homeownership costs are measured by the Consumer Price Index. Effective with data for January 1983, the Consumer Price Index for all Urban Consumers (CPI-U) will incorporate a rental equivalence measure for homeownership costs. Effective with data for January 1985, the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) will also incorporate the rental equivalence approach.

Because of severe budget constraints, the Bureau of Labor Statistics did not carry out the government directive to rebase the Consumer Price Index and the Producer Price Index to the new U.S. government 1977=100 reference base. Postponement was required because of the high cost of both the direct production work necessary to prepare the data and the information services to explain the change. No alternative date for adopting the 1977 reference base has been set. All Items indexes on a 1977=100 reference base are available upon request from the Bureau.

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Business in Nebraska

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College of Business Administration**

NEBRASKA RETAIL SALES, 1980-81

Nebraska's net taxable retail sales were $9,464 million in 1981, up $544 million over 1980's total of $8,921 (see Table 2, page 2). Retail sales increased 6.1 percent in 1981 on a dollar volume basis, up from the 2.1 percent increase recorded in 1980. Substantially larger dollar volume gains in retail sales were recorded in Nebraska in 1979, 12 percent, and in 1978, 11.1 percent.

When adjustments are made for price increases, the gain in retail sales is eliminated. Using the commodity component of the consumer price index, retail sales were down 2.1 percent in 1981 compared with 1980. While this represents a decline in real retail sales, it is a considerable improvement from 1980 when real retail sales declined by 9.0 percent. Real retail sales recorded a very small increase in 1979, 0.6 percent, and a larger increase in 1978, 3.7 percent.

The geographical distribution of changes in retail sales is summarized in Table 2. Only four regions—Region 1, Region 2, Region 20, and Region 21—recorded increases above the state average of 6.1 percent. Most regions managed about the same dollar volume in 1981 as in 1980. It should be noted that regional comparisons are not affected by use of dollar volume or price adjusted data. Since the method of adjusting for price increases involves using the same deflator, the commodity component of the consumer price index, each area would be deflated by exactly the same amount.

Counties recording an increase in retail sales in excess of the state's average gain of 6.1 percent are indicated in Map 1 (page 3) by the shaded areas. The major metropolitan areas, Douglas, Sarpy, and Lancaster counties, did somewhat better than the state as a whole, although the difference was small. Gage and Johnson counties also recorded gains above the state average.

Another area which did better than the state is concentrated around the Norfolk-Columbus area. Platte, Madison, Pierce, Antelope, and Boone counties all had gains in excess of the state's average of 6.1 percent. Red Willow County, Phelps County, and Rock County in central Nebraska all recorded increases above the state's average in 1981.

The remaining counties with gains in excess of the state's average in 1981 are concentrated in the western portion and include Arthur, Keith, Deuel, Cheyenne, Kimball, Box Butte, and Sioux counties.

(continued on page 3)

Table 1
NET TAXABLE RETAIL SALES[1] IN SELECTED NEBRASKA TRADING CENTERS, 1980 AND 1981
WITH PERCENTAGE CHANGES FOR SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

Trade Center	Region[2]	Unadjusted for Price Changes: Thousands of Dollars 1980	Unadjusted for Price Changes: Thousands of Dollars 1981	Unadjusted for Price Changes: Percent of Change	Adjusted for Prices[3]: Percent of Change
Alliance	23	63,768	70,793	+11.0	+2.4
Beatrice	14	84,484	90,019	+ 6.6	−1.7
Bellevue	1	96,017	108,361	+12.9	+4.1
Broken Bow	26	40,409	43,781	+ 8.3	−0.1
Chadron	23	35,624	38,199	+ 7.2	−1.1
Columbus	10	140,353	153,394	+ 9.3	+0.8
Fairbury	14	33,344	33,677	+ 1.0	−6.8
Falls City	7	31,401	32,739	+ 4.3	−3.8
Fremont	5	152,271	164,108	+ 7.8	−0.6
Grand Island	12	339,871	353,103	+ 3.9	−4.2
Hartington	25	17,176	18,247	+ 6.2	−2.0
Hastings	13	167,281	174,986	+ 4.6	−3.5
Holdrege	17	55,524	61,793	+11.3	+2.6
Kearney	15	161,580	173,041	+ 7.1	−1.2
Kimball	21	34,617	38,616	+11.6	+2.9
Lexington	16	56,584	60,802	+ 7.5	−0.9
Lincoln	2	960,523	1,024,303	+ 6.6	−1.6
McCook	20	78,047	84,212	+ 7.9	−0.5
Nebraska City	4	45,026	46,737	+ 3.8	−4.3
Norfolk	11	167,030	179,521	+ 7.5	−0.9
North Platte	18	173,262	177,725	+ 2.6	−5.4
Ogallala	19	50,102	53,723	+ 7.2	−1.1
O'Neill	24	42,587	45,172	+ 6.1	−2.2
Omaha	1	2,331,895	2,516,193	+ 7.9	−0.5
Scottsbluff/Gering	22	194,279	208,356	+ 7.2	−1.1
Seward	8	40,264	41,967	+ 4.2	−3.9
Sidney	21	38,872	42,213	+ 8.6	+0.2
So.Sioux City	3	38,094	41,199	+ 8.2	−0.3
Wayne	11	34,506	35,602	+ 3.2	−4.8
West Point	6	29,062	29,618	+ 1.9	−6.0
York	9	69,852	72,661	+ 4.0	−4.1
Total 30 Centers		5,803,705	6,214,861	+ 7.1	−1.2
Total State[4]		8,099,608	8,620,878	+ 6.4	−1.8

[1] Excluding motor vehicle sales.
[2] Nebraska Planning and Development Regions.
[3] Current dollar sales adjusted (deflated) for price changes using commodity prices component of the Bureau of Labor Statistics' Consumer Price Index.
[4] Total state retail sales include some retail sales that cannot be allocated to cities, counties, or regions.
Source: Compilations by Bureau of Business Research from special tabulations provided by Nebraska Tax Commissioner.

Table 2

NET TAXABLE RETAIL SALES[1] IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS, 1980 AND 1981 BY COUNTIES, WITH PERCENTAGE CHANGES FOR SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

Region and County	Unadjusted for Price Changes			Adjusted for Prices[2]
	Thousands of Dollars		Percent of Change	Percent of Change
	1980	1981		
Region 1	2,754,605	3,002,496	+ 9.0	+ 0.5
Douglas	2,573,622	2,782,656	+ 8.1	- 0.3
Sarpy	180,983	219,840	+21.5	+12.0
Region 2	1,059,509	1,128,815	+ 6.5	- 1.7
Lancaster	1,059,509	1,128,815	+ 6.5	- 1.7
Region 3	57,479	60,827	+ 5.8	- 2.4
Dakota	57,479	60,827	+ 5.8	- 2.4
Region 4	189,340	194,509	+ 2.7	- 5.3
Cass	54,664	57,805	+ 5.7	- 2.5
Otoe	74,705	74,667	+ 0.4	- 7.8
Saunders	60,271	62,037	+ 2.9	- 5.1
Region 5	260,870	271,435	+ 4.0	- 4.0
Dodge	202,844	211,460	+ 4.2	- 3.9
Washington	58,026	59,975	+ 3.4	- 4.7
Region 6	104,767	104,103	- 0.6	- 8.4
Burt	37,048	35,715	- 3.6	-11.1
Cuming	53,965	55,576	+ 3.0	- 5.0
Thurston	13,754	12,812	- 6.8	-14.1
Region 7	108,583	112,785	+ 3.9	- 4.2
Johnson	19,375	20,573	+ 6.2	- 2.1
Nemaha	31,056	32,576	+ 4.9	- 3.3
Pawnee	11,333	11,206	- 1.1	- 8.8
Richardson	46,819	48,430	+ 3.4	- 4.6
Region 8	152,371	153,921	+ 1.0	- 6.8
Butler	30,553	29,956	- 2.0	- 9.6
Seward	61,890	64,437	+ 4.1	- 4.0
Saline	59,928	59,528	- 0.7	- 8.4
Region 9	158,159	157,685	- 0.3	- 8.0
Fillmore	39,372	38,072	- 3.3	-10.8
Polk	24,957	24,731	- 0.9	- 8.6
York	93,830	94,882	+ 1.1	- 6.7
Region 10	272,773	288,510	+ 5.8	- 2.4
Boone	34,894	37,007	+ 6.1	- 2.2
Colfax	44,698	46,137	+ 3.2	- 4.8
Nance	15,010	14,479	- 3.5	-11.0
Platte	178,171	190,887	+ 7.1	- 1.2
Region 11	326,042	347,305	+ 6.5	- 1.8
Antelope	34,742	37,509	+ 8.0	- 0.4
Madison	210,868	225,812	+ 7.1	- 1.2
Pierce	28,243	30,669	+ 8.6	+ 0.2
Stanton	11,048	11,048	0.0	- 7.8
Wayne	41,141	42,267	+ 2.7	- 5.2
Region 12	478,173	485,322	+ 1.5	- 6.4
Hall	380,197	388,833	+ 2.3	- 5.7
Hamilton	39,087	37,140	- 5.0	-12.4
Howard	24,364	23,881	- 2.0	- 9.6
Merrick	34,525	35,468	+ 2.7	- 5.2
Region 13	277,294	286,776	+ 3.4	- 4.6
Adams	190,895	198,850	+ 4.2	- 3.9
Clay	34,731	34,285	- 1.3	- 9.0
Nuckolls	34,162	35,374	+ 3.5	- 4.5
Webster	17,506	18,267	+ 4.3	- 3.8
Region 14	193,718	202,467	+ 4.5	- 3.6
Gage	111,885	118,804	+ 6.2	- 2.1
Jefferson	48,326	48,418	+ 0.2	- 7.6
Thayer	33,507	35,245	+ 5.2	- 3.0
Region 15	245,860	257,327	+ 4.7	- 3.5
Buffalo	213,860	225,294	+ 5.3	- 2.8
Kearney	32,000	32,033	+ 0.1	- 7.7
Region 16	152,358	156,213	+ 2.5	- 5.4
Dawson	131,112	135,408	+ 3.3	- 4.7
Frontier	11,241	11,614	+ 3.3	- 4.7
Gosper	10,005	9,191	- 8.1	-15.3
Region 17	132,238	138,281	+ 4.6	- 3.6
Franklin	16,818	16,182	- 3.8	-11.3
Furnas	27,975	28,844	+ 3.1	- 4.9
Harlan	17,768	18,374	+ 3.4	- 4.6
Phelps	69,677	74,881	+ 7.5	- 0.9
Region 18	214,360	217,783	+ 1.6	- 6.3
Hooker	3,780	3,839	+ 1.6	- 6.3
Lincoln	203,902	207,748	+ 1.9	- 6.0
Logan	1,963	1,750	-10.9	-17.8
McPherson	694	634	- 8.6	-15.7
Thomas	4,021	3,812	- 5.2	-12.6
Region 19	122.000	127,565	+ 4.6	- 3.6
Arthur	1,161	1,326	+14.2	+ 5.3
Chase	33,388	34,064	+ 2.0	- 5.9
Grant	3,902	3,673	- 5.9	-13.2
Keith	62,124	66,571	+ 7.2	- 1.2
Perkins	21,425	21,931	+ 2.4	- 5.6
Region 20	118,715	126,033	+ 6.2	- 1.1
Dundy	12,480	12,757	+ 2.2	- 5.7
Hayes	2,361	2,030	-14.0	-20.7
Hitchcock	11,729	11,736	+ 0.1	- 7.7
Red Willow	92,145	99,510	+ 8.0	- 0.4
Region 21	100,184	109,192	+ 9.0	+ 0.5
Cheyenne	49,858	53,589	+ 7.5	- 0.9
Deuel	10,545	11,329	+ 7.4	- 0.9
Kimball	39,781	44,274	+11.3	+ 2.6
Region 22	283,479	295,136	+ 4.1	- 4.0
Banner	1,671	1,555	- 6.9	-14.2
Garden	10,730	9,976	- 7.0	-14.2
Morrill	32,197	31,971	- 0.7	- 8.4
Scotts Bluff	238,881	251,634	+ 5.3	- 2.8
Region 23	171,374	180,675	+ 5.4	- 2.8
Box Butte	76,177	82,549	+ 8.4	- 0.1
Dawes	46,467	49,074	+ 5.6	- 2.6
Sheridan	44,995	45,089	+ 0.2	- 7.6
Sioux	3,735	3,963	+ 6.1	- 2.1
Region 24	164,300	168,226	+ 2.4	- 5.6
Boyd	10,323	9,566	- 7.3	-14.5
Brown	26,392	26,117	- 1.0	- 8.7
Cherry	34,817	35,586	+ 2.2	- 5.7
Holt	75,348	76,844	+ 2.0	- 5.9
Keya Paha	2,601	2,467	- 5.2	-12.5
Rock	14,819	17,646	+19.1	+ 9.8
Region 25	100,807	101,142	+ 0.3	- 7.5
Cedar	42,146	43,278	+ 2.7	- 5.3
Dixon	15,311	15,444	+ 0.9	- 7.0
Knox	43,350	42,420	- 2.1	- 9.7
Region 26	139,932	140,091	+ 0.1	- 7.7
Blaine	2,305	2,393	+ 3.8	- 4.2
Custer	67,976	70,780	+ 4.1	- 4.0
Garfield	12,175	11,542	- 5.2	-12.6
Greeley	11,732	11,022	- 6.1	-13.3
Loup	1,486	1,410	- 5.1	-12.5
Sherman	13,780	12,861	- 6.7	-13.9
Valley	27,717	27,583	- 0.5	- 8.2
Wheeler	2,761	2,500	- 9.5	-16.5
State Total[3]	8,920,736	9,464,525	+ 6.1	- 2.1

[1] Motor vehicle sales are recorded as in counties in which the vehicles were first registered regardless of point of sale.

[2] Current dollar sales adjusted (deflated) for price changes using commodity prices component of the Bureau of Labor Statistics' Consumer Price Index.

[3] Total state retail sales include some retail sales that cannot be allocated to cities, counties, or regions.

Source: Compilation by Bureau of Business Research, University of Nebraska-Lincoln, from tabulations provided by the Nebraska Tax Commissioner.

(continued from page 1)

If one takes a longer perspective in examining shifts in retail sales over the decade 1971-81, the larger percentage gains have been largely in the nonmetropolitan areas of Nebraska. Sarpy County was the only metropolitan county to record an increase in retail sales above the state's average increase over the interval 1971-81. The remaining counties recording gains above the state's average include Wayne, Pierce, Madison, Platte, Hall, Buffalo, Dawson, Phelps, Red Willow, Wheeler, Holt, Rock, Brown, Chase, Perkins, Kimball, Banner, Morrill, Scotts Bluff, Box Butte, and Sioux. Some of these counties with gains in excess of the state's average have very small retail trade volumes, but others like Hall, Platte, Buffalo, Dawson, Red Willow, Scotts Bluff, and Box Butte had and continue to build from substantial retail sales bases.

The tendency toward increased concentration in retail sales was very apparent over the ten-year interval 1971-81. Larger volume areas tended to expand their retail sales somewhat faster than the smaller retail trade centers. For instance, counties with less than $10 million in retail sales in 1971 recorded a decade increase of approximately 120 percent in retail sales, compared with a statewide average of 162 percent. Counties with retail sales in excess of $100 million in 1971 recorded decade gains of approximately 154 percent, somewhat less than the average increase for the state.

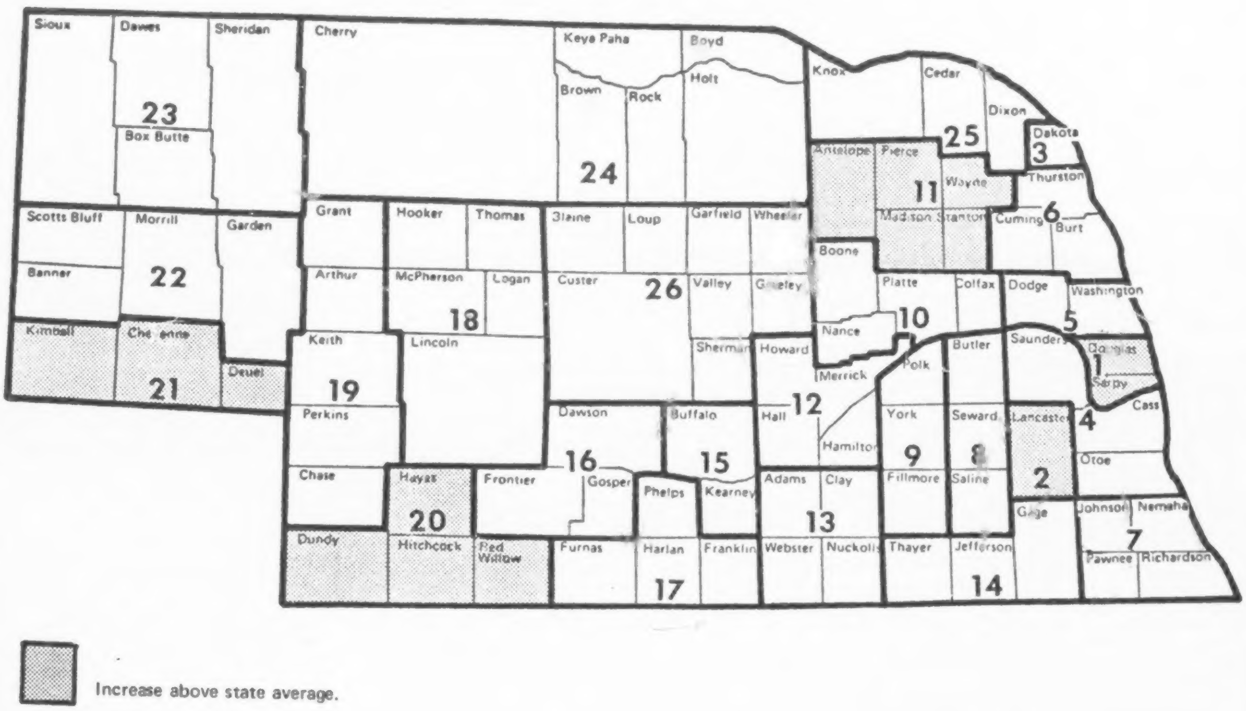
There are important exceptions, of course, to any generalization, and some smaller retail trade centers in Nebraska did exceedingly well during the decade 1971-81. Rock County, for instance, had a retail sales base of $5.8 million in 1971 which expanded to $17.6 million by 1981, an increase of 203 percent. Chase County had a retail sales base of $10.8 million in 1971 which expanded to $34.1 million in 1981, a 216 percent increase. There are other important exceptions, but in general the tendency was for retail sales to become increasingly concentrated in the larger dollar volume trade centers.

Data in Table 1 summarize retail sales for 1980 and 1981 for 30 Nebraska trade centers. Note that information in Table 1 excludes motor vehicle sales, while data in Table 2 include motor vehicle sales.

The 30 trade centers recorded an increase in dollar volume retail sales of 7.1 percent, somewhat better than the 6.4 percent recorded for the state (these data refer only to nonmotor vehicle retail sales). When adjusted for price changes, nonmotor vehicle retail sales were down slightly over 1 percent among the 30 trade centers. Larger gains were recorded in Bellevue, 12.9 percent; Kimball, 11.6 percent; Holdrege, 11.3 percent; and Alliance, 11.0 percent. Other trade centers which recorded gains above the 7.1 percent average for the 30 trade centers include Broken Bow, 8.3 percent; Chadron, 7.2 percent; Columbus, 9.3 percent; Fremont, 7.8 percent; Lexington, 7.5 percent; McCook, 7.9 percent; Norfolk, 7.5 percent; Ogallala, 7.2 percent; Omaha, 7.9 percent; Scottsbluff-Gering, 7.2 percent; Sidney, 8.6 percent; and South Sioux City, 8.2 percent. Kearney recorded an increase of 7.1 percent, exactly that recorded by the 30 trade centers combined.

D. E. P.

Map 1
REGIONS RECORDING ABOVE-STATE-AVERAGE GAINS
IN RETAIL SALES DOLLAR VOLUME, 1980-1981


Sioux
Dawes
Sheridan
Cherry
Keya Paha
Boyd
Knox
Cedar
Dixon
Dakota
Brown
Rock
Holt
23
Box Butte
24
25
3
Antelope
Pierce
11
Wayne
Thurston
Madison
Stanton
Cuming
6
Burt
Scotts Bluff
Morrill
Garden
Grant
Hooker
Thomas
Blaine
Loup
Garfield
Wheeler
Boone
Banner
22
Arthur
McPherson
Logan
Custer
26
Valley
Greeley
Platte
Colfax
Dodge
Washington
18
Nance
10
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Kimball
Cheyenne
Keith
Lincoln
Sherman
Howard
Butler
Saunders
Douglas
21
Deuel
19
Merrick
Polk
1
Sarpy
Perkins
Dawson
Buffalo
Hall
12
York
Seward
Lancaster
4
Cass
Hamilton
16
15
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8
Otoe
Chase
Hayes
Frontier
Gosper
Phelps
Kearney
Adams
Clay
Fillmore
Saline
2
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13
Gage
Johnson
Nemaha
Dundy
Hitchcock
Red Willow
Furnas
Harlan
Franklin
Webster
Nuckolls
Thayer
Jefferson
7
Pawnee
Richardson
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14
Increase above state average.

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Review and Outlook

Real output increased a scant 0.2 percent in Nebraska in February. This small increase January-February follows a sizable January decline in the state's physical volume index. The February increase resulted from a mixed picture across the sectors of the Nebraska economy. The agriculture component of the index declined 0.9 percent and construction declined 3.0 percent. Manufacturing recorded a 1.0 percent increase and the distributive trade sector recorded a 0.6 percent gain.

The Nebraska economy peaked in July of 1981. Two monthly declines were followed by increases in the index in October and November and a further slight increase in December. January 1982 brought a decline of 1.9 percent in the index. The February 1982-February 1981 reading of the index indicates that there has been little change in the state's real output. A comparison with two years previous, February 1980, indicates that output is down 3.6 percent.

The agriculture component was down 0.9 percent January-February 1982. The February reading of the agriculture component is well above the February 1981 and 1980 levels.

Nebraska cash farm marketings were down $49 million January-February 1982 (unadjusted for seasonal variation). On a year-previous basis, cash farm marketings were up nearly $196 million. This component should show some improvement in the months ahead because of the rise in cattle and hog prices which has developed since February 1982.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

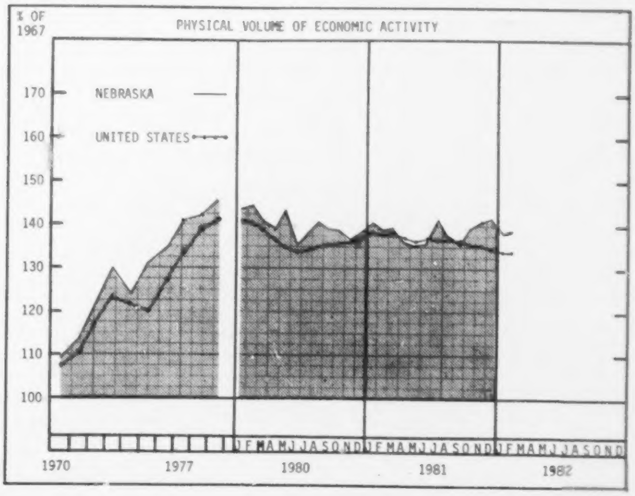
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

February 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	104.6	103.5	103.6	103.7
Agricultural	119.3	104.9	112.6	101.1
Nonagricultural	102.6	103.5	102.4	103.7
Construction	70.7	90.5	74.1	90.2
Manufacturing	99.4	98.5	98.7	99.1
Distributive	104.9	106.0	104.4	106.2
Government	108.2	107.4	108.3	107.6
Physical Volume	100.1	97.1	99.2	97.1
Agricultural	128.0	113.1	123.3	110.0
Nonagricultural	96.5	96.7	96.0	96.7
Construction	67.7	86.7	70.9	86.4
Manufacturing	96.3	94.2	95.3	94.5
Distributive	97.4	98.4	96.6	98.3
Government	101.2	97.7	101.3	97.8

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	370.7	358.2
Agricultural	373.3	330.5
Nonagricultural	370.1	359.1
Construction	221.1	306.8
Manufacturing	354.5	303.4
Distributive	391.0	396.7
Government	378.3	351.8
Physical Volume	138.4	134.0
Agricultural	151.7	136.6
Nonagricultural	136.3	133.9
Construction	66.6	92.4
Manufacturing	149.2	124.0
Distributive	138.0	140.0
Government	145.7	147.5

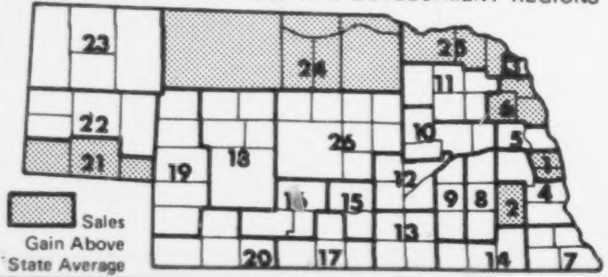


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Feb. 1982 as percent of Feb. 1981	Feb. 1982 as percent of Feb. 1981	Year to date'82 as percent of Year to date'81
The State	97.8	96.9	90.7
1 Omaha	97.9	96.4	94.3
Bellevue	78.8		
2 Lincoln	104.9	103.8	93.0
3 So. Sioux City	95.8	92.3	84.6
4 Nebraska City	90.7	91.8	85.0
5 Fremont	104.8	98.5	87.0
Blair	101.3		
6 West Point	97.6	100.5	92.4
7 Falls City	100.8	94.0	87.6
8 Seward	96.3	94.5	85.8
9 York	106.8	92.2	86.8
10 Columbus	94.9	89.7	76.4
11 Norfolk	94.5	92.0	87.3
Wayne	85.5		
12 Grand Island	91.0	88.2	81.9
13 Hastings	89.5	90.7	84.1
14 Beatrice	98.2	91.4	83.1
Fairbury	92.3		
15 Kearney	100.2	96.4	87.9
16 Lexington	89.4	88.5	88.1
17 Holdrege	90.0	92.7	87.5
18 North Platte	85.5	83.7	81.7
19 Ogallala	81.2	84.0	84.5
20 McCook	92.8	92.6	84.9
21 Sidney	103.8	101.2	94.8
Kimball	104.4		
22 Scottsbluff/Gering	92.3	89.4	82.8
23 Alliance	95.0	95.4	86.7
Chadron	86.7		
24 O'Neill	97.5	93.1	90.4
25 Hartington	105.8	95.8	89.5
26 Broken Bow	92.6	93.1	86.6

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

The nonagriculture components of the Nebraska economy increased 0.4 percent January-February 1982. The construction component of the index declined 3.0 percent and stands at its lowest level since June 1980. The construction component of the index is well below February 1981 and February 1980 levels. This component of the index peaked in February 1981 and has since declined by more than 35 percent.

The manufacturing component of the index increased 1.0 percent in February 1982. The index now stands at 149.2 percent (1967=100). Manufacturing output in Nebraska continues to lag year-previous levels. The index is down approximately 3.7 percent from February 1981 and is down 15 percent from the February 1980 level. The manufacturing component of the Nebraska physical volume index also peaked in July at 166.8 percent and has moved erratically downward since that time.

The distributive trade index increased 0.6 percent January-February 1982. This index is also below year-previous levels by approximatély 2.6 percent. Output in this sector has changed very little since September 1981.

The government component of the index was down 0.3 percent in February 1982. The index stood at 145.7 percent, which compares with an index value of 144.1 percent in February 1981 and 145.9 percent in February 1980. Output, as measured by this index, has changed little in the past three years.

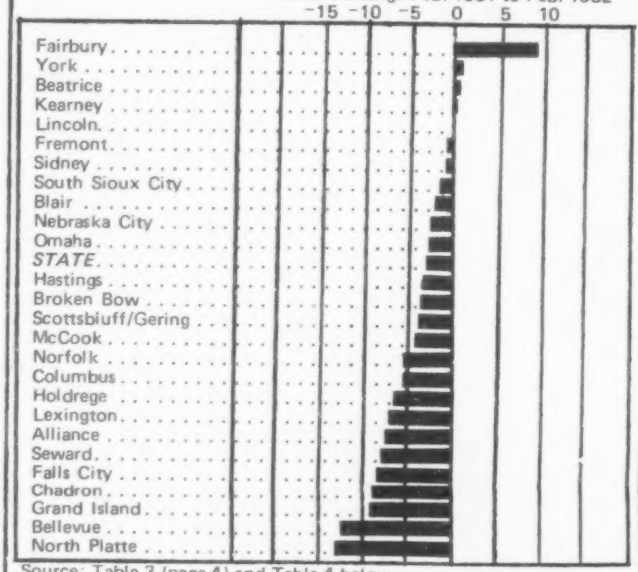
Retail sales managed a 1.3 percent increase in February 1982 compared with year-previous levels. Nonvehicle retail sales were up 2.2 percent while motor vehicle sales continued to decline, down 8.9 percent. Retail sales totaled $660 million in February compared with $652 million one year previous. The vehicle-nonvehicle breakdown indicates nonvehicle retail sales at $605 million in February 1982 compared with $592 million in February 1981, while motor vehicle sales were $55 million in February 1982 compared with $59.8 million one year previous. On a price-adjusted basis, total retail sales were down 3.1 percent. At the national level, retail sales were up 0.9 percent on a dollar volume basis, down 3.4 percent when adjusted for price changes.

A few cities recorded retail sales gains, on a year-previous basis, above the state change. York recorded a price-adjusted increase in retail sales of 6.8 percent, followed by Blair at 6.3 percent. Other cities where sales were strong include Hartington, up 5.8 percent; Lincoln, up 4.9 percent; Fremont, up 4.8 percent; Kimball, up 4.4 percent; and Sidney, up 3.8 percent.

The city business indexes reported in Table 4 reflect the widespread extent of the recession. Only four Nebraska communities, Fairbury, York, Beatrice, and Kearney, managed to record increases in their respective city business indexes.

D. E. P.

CITY BUSINESS INDEXES
Percent Change Feb. 1981 to Feb. 1982



Source: Table 3 (page 4) and Table 4 below.

4. FEBRUARY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.3	56.2	110.4
Alliance	90.4	86.2	107.3
Beatrice	103.0	93.5	109.5
Bellevue	101.3	38.8	117.3
Blair	100.2	47.2	117.3
Broken Bow	98.4	94.3	106.7
Chadron	101.4	54.6	101.9
Columbus	99.8	56.4	114.5
Fairbury	100.2	1035.2	106.7
Falls City	98.9	20.9	113.3
Fremont	100.5	55.7	110.2*
Grand Island	102.2	26.2	111.4
Hastings	104.9	69.8	176.8
Holdrege	97.9	85.4	108.3
Kearney	102.3	80.4	117.1
Lexington	101.3	60.4	112.8
Lincoln	100.3	61.8	108.0
McCook	93.3	139.4	105.9
Nebraska City	97.8	148.7	106.3
Norfolk	99.2	62.0	111.1
North Platte	97.8	27.6	114.5
Omaha	101.3	52.9	107.7
Scottsbluff/Gering	101.5	71.2	101.9
Seward	95.8	43.2	107.7
Sidney	97.9	76.4	109.3
So. Sioux City	102.0	78.1	114.4
York	100.6	57.0	109.0

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

February 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	283.4	107.7	108.1
Commodity component	259.5	104.5	105.0
Wholesale Prices	298.5	103.8	108.0
Agricultural Prices			
United States	242.0	92.7	92.0
Nebraska	246.0	93.2	91.4

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

HOUSING UNITS AUTHORIZED IN MAJOR NEBRASKA CITIES, 1979-81

The fact that the construction industry has been experiencing hard times in recent years comes as a surprise to no one. What is not so well known is the extent of the decline. Listed in the accompanying table are the numbers of new privately owned housing units authorized by building permits, as released by the U.S. Bureau of the Census. Although this does not translate directly into private housing units built in any given year, the numbers are likely to be close estimates. Caution should be used when interpreting percentage changes where the total number of permits issued is small. In these situations, small absolute changes may produce large percentage changes.

In both Omaha and Lincoln the number of building permits in 1981 was well under half the number issued in 1979. Other cities with declines of more than 50 percent in the number of permits issued over the period 1979-81 were La Vista, -93.5 percent; Seward, -87.2 percent; Fremont, -81.0 percent; Alliance, -79.1 percent; Scottsbluff, -78.3 percent; South Sioux City, -74.1 percent; Beatrice, -62.9 percent; North Platte, -55.6 percent; Kearney, -53.1 percent; and Columbus, -52.2 percent. As one would expect, the majority of cities experienced the greatest declines in 1980 and 1981.

Plattsmouth and Papillion were the only two cities to show increases in building permits issued from 1979 to 1981. Although the number of permits issued for Papillion dropped in 1981 from the previous year's level, Plattsmouth experienced increases during the entire period. Only Plattsmouth, Grand Island, McCook, and Gering showed increases in 1981 over the 1980 levels. Grand Island's rebuilding following the 1980 tornado is no doubt partially responsible for the slight increase in building permits issued in 1981 over the 1980 level.

LYNN NEJEZCHLEB

NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED BY BUILDING PERMITS

				Percent Change		
	1979	1980	1981	1979 to 1980	1980 to 1981	1979 to 1981
Alliance	211	202	44	- 4.3	-78.2	-79.1
Kearney	256	236	120	- 7.8	-49.1	-53.1
Plattsmouth	19	26	44	+36.8	+69.2	+131.2
South Sioux City	81	78	21	- 3.7	-73.1	-74.1
Lexington	39	37	21	- 5.1	-43.2	-46.2
Fremont	163	66	31	-59.5	-53.0	-81.0
Omaha	1,989	1,471	805	-26.0	-45.3	-59.5
Beatrice	116	46	43	-60.3	- 6.5	-62.9
Grand Island	509	272	276	-46.6	+ 1.5	-45.8
Lincoln	1,456	1,043	629	-28.4	-39.7	-56.8
North Platte	234	159	104	-32.1	-34.6	-55.6
Norfolk	N/A	92 (9 months)	77			
Columbus	245	183	117	-25.3	-36.1	-52.2
McCook	40	27	28	-32.5	+ 3.7	-30.0
Crete	28	88	14	+214.3	-84.1	-50.0
Bellevue	186	282	95	+51.6	-66.3	-48.9
La Vista	184	121	12	-34.2	-90.1	-93.5
Papillion	114	169	115	+48.2	-32.0	+ 0.9
Sarpy Co. (unincorporated)	359	480	84	+33.7	-82.5	-76.6
Gering	81	43	53	-46.9	+23.3	-34.6
Scottsbluff	92	92	20	0.0	-78.3	-78.3
Seward	78	25	10	-67.9	-60.0	-87.2
Blair	36	28	27	-22.2	- 3.6	-25.0

Source: U.S. Department of Commerce, Bureau of the Census, *Housing Units Authorized by Building Permits and Public Contracts: Annual 1980* and *December 1981,* Construction Reports, C40 series.

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Business in Nebraska

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College of Business Administration

POPULATION CHANGES IN NEBRASKA CITIES AND TOWNS

Several interesting trends have emerged from the 1980 Census data which have been released so far for Nebraska. Previous issues of *Business in Nebraska* have focused on some of these trends at the state and county level, but this article will focus on some of the changes which are taking place in Nebraska cities and towns.

With the decline and apparent reversal of Nebraska's out-migration trend of the past forty years,[1] it becomes a matter of considerable interest and importance to look at the size and location of places in Nebraska which are gaining and losing population. Is it just the larger cities which are growing in size, or are smaller places able to maintain their populations or attract new residents?

Following the 1950 Census, *Business in Nebraska* published an article dealing with population trends of Nebraska cities and towns and continued to publish similar articles following the 1960 and 1970 Censuses. In these reports it was shown that there was a close association between community size and rate of growth. Generally, smaller towns tended to decline in population or grow less rapidly than larger towns.

Table 1 shows the number of places in Nebraska by size class for 1980 and each of the previous five decennial censuses. Although there are other methods for classifying communities by size, the method used in Table 1 allows for greater detail in classifying the smaller communities. Because this method was used previously, it also allows for comparisons back to 1930.

The data reveal that the number of places in Nebraska declined for the first time during the 1970s. Between censuses there always are a number of places which come into existence or no longer exist, but between 1970 and 1980 only one town incorporated, while six were either disincorporated (3), annexed (2), or merged (1) with another community.

Another trend evident in Table 1 is that, in general, the number of very small towns and the number of larger towns have increased, while the number in the middle group have declined.

The dividing line at the lower end of the scale seems to have remained at 125. The quantity of towns below this size has risen from 33 in 1930 to 96 in 1980. For the first time in several decades, however, this long-term trend was broken in 1980 as the number of towns less than 125 fell from 104 in 1970 to 96. The increase in the number of very small towns can be explained entirely by the decline of larger communities which have tended to drop into a lower class size with each succeeding census, rather than from the creation of new towns. In Nebraska, the minimum population required for incorporation is 100.

Between 1930 and 1980, the number of communities in the 125 to 999 range dropped sharply from 388 to 313. On the other hand, there was considerable stability in the number of places between 1,000 and 3,999 in size. In 1930, 89 communities could be found in this group, and in 1980, the amount was 90.

The dividing line at the upper end of the scale appears to have remained at 4,000 as each succeeding decade has experienced an increase in the number of cities larger than 4,000 in population. The 37 cities in 1980 were more than double the total recorded fifty years earlier.

Table 1 also shows the median and mean size of the cities and towns in Nebraska. In looking at the table, it should be readily apparent that the state has always had many small towns. This characteristic is emphasized by the median size. In 1980, the median-size place had 367 residents.

(continued on page 2)

Table 1
NEBRASKA CITIES AND TOWNS
BY POPULATION SIZE CLASS

Population Size Class	Number of Places in Each Class					
	1980	1970	1960	1950	1940	1930
Below 16	2	2	1	0	0	0
16-31	8	11	5	2	2	0
32-63	25	25	25	14	1	2
64-124	61	66	62	60	42	31
125-249	104	111	116	116	125	116
250-499	121	123	129	137	154	163
500-999	88	80	88	91	102	109
1,000-1,999	71	64	62	63	57	64
2,000-3,999	19	22	20	31	28	25
4,000-7,999	20	23	16	12	10	8
8,000-15,999	7	5	8	7	7	7
16,000-31,999	7	6	4	2	1	1
32,000 and over	3	3	2	2	2	2
Total:	536	541	538	537	531	528
Median size of places	367	344	336	374	395	421
Mean size of places	2,132	2,073	1,808	1,606	1,466	1,429

Source: U.S. Bureau of the Census, *PC80-1-A29, Number of Inhabitants,* and similar reports for preceding years.

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[1] "Migration Trends and Patterns in Nebraska," *Business in Nebraska,* Bureau of Business Research, University of Nebraska-Lincoln, June, 1981.

(continued from page 1)

In other words, one-half of all the communities in the state had fewer than 367 residents. Although 1980's median was below the value recorded in 1930, it represented the second consecutive decade in which the median increased.

The mean size of place has increased steadily from census to census, with a mean of 2,132 in the most recent census. Because of the way in which a mean is calculated, its growth is an indication of the previously mentioned trend in the increase in numbers of both the relatively large and relatively small communities in Nebraska.

Table 2 presents the median rates of population change between censuses for cities and towns by class size. It should be noted that for the purposes of comparison, the class size was determined on the basis of the population of a community at the first of the two census dates. The actual change in population for the entire state is shown at the bottom of the table.

The data indicate that a significant pattern that emerged in the 1970 Census became more prominent in 1980. Prior to 1970, population declines were experienced by progressively larger towns, with the magnitude of the growth or decline directly related to city size. Between 1950 and 1960 all size classes under 2,000 had more declining than growing towns. From 1960 to 1970, this was true for towns under 500, but between 1970 and 1980 only those classes with fewer than 64 inhabitants had more declining towns. Even then, the median rate of decrease was nearly five times smaller than it was ten years earlier.

In addition to the fact that almost every size class had more towns which grew than declined during the 1970s, the close, direct relationship between the rates of growth or decline and size class seemed to disappear. The median rates of increase were quite similar for classes larger than 250, and the 6.7 percent growth rate in the 500-999 class was the largest during the 1970s.

GROWTH OF SMALL TOWNS BY REGION

The previous section mentioned a turnaround in the population changes of Nebraska's smaller communities. It appeared to have begun some time prior to the 1970 Census, but gained momentum during the 1970s. Some indication of the geographic extent of this resurgence can be seen by observing the general location pattern of the towns which grew. In 1980 there were 409 Nebraska towns which had 1970 populations of fewer than 1,000 inhabitants. Of these communities, 247 experienced an increase in population. Thus, 60 percent of the towns under 1,000 grew between 1970 and 1980. This represented a sizable increase from the 44 percent which grew between 1960 and 1970. It must be remembered that this does not measure the total population but only the number of towns.

Table 2
PERCENTAGE POPULATION CHANGE
IN NEBRASKA CITIES AND TOWNS

Population Size Class	Median Percentage Change in Population 1970-1980	1960-1970	1950-1960	1940-1950	1930-1940
Below 63	−2.9	−14.3	−19.4	−21.7	+3.9
64-124	0.0	−3.6	−16.2		
125-249	+3.6	−5.1	−10.3	−14.9	−7.9
250-499	+4.8	−1.4	−7.6	−8.2	−5.9
500-999	+6.7	+1.0	−3.2	−3.0	−2.8
1,000-1,999	+4.0	+3.2	−3.7	+3.0	+2.6
2,000-3,999	+6.3	+12.5	+13.8	+11.3	+6.5
4,000 and over	+5.4	+11.7	+14.9	+16.7	+3.3
State percent change	+5.7	+5.1	+6.5	+0.7	−4.5

Source: U.S. Bureau of the Census, *PC80-1-A29, Number of Inhabitants,* and similar reports for preceding years.

Table 3 shows, by region, the percentage change for the total population of each region and the number and percent of towns below 1,000 which grew between 1970 and 1980. In general, those regions which added population also had relatively more growing small towns. In all, 17 regions experienced population growth, and 66 percent of the towns under 1,000 in these regions gained in population. There were 5 regions which recorded growth rates exceeding 10 percent, and in these regions 80 percent of the small towns increased in size.

Even in declining regions, however, there was a sizable number of small towns which grew. Overall, more than half the towns

Table 3
POPULATION CHANGE OF NEBRASKA TOWNS
BY REGION, 1970-1980*

Region Number	Percentage Population Change	Towns below 1,000 Total Number	Number Growing	Percentage Growing
1	+6.1	4	0	0
2	+14.8	11	10	91
3	+26.2	3	3	100
4	+7.0	33	20	61
5	+6.8	11	8	73
6	−2.0	8	6	75
7	−8.2	23	10	44
8	+4.1	25	16	64
9	+2.6	17	14	82
10	+3.0	18	8	44
11	+6.3	18	11	61
12	+8.1	19	14	74
13	−2.5	24	12	50
14	−4.8	18	14	78
15	+10.3	9	8	89
16	+8.3	10	6	60
17	−1.8	20	9	45
18	+21.0	22	16	73
19	+8.4	10	7	70
20	+1.0	11	7	64
21	−10.8	7	3	43
22	+4.2	8	5	62
23	+12.1	5	3	60
24	−1.9	25	8	32
25	−4.5	24	13	54
26	−4.2	25	17	65
State Total:	+5.7	409	247	60

---

*The boundaries of, and counties included in, each region are shown on the map on page 4.

Source: U.S. Bureau of the Census, *PC80-1-A29, Number of Inhabitants,* and similar reports for preceding years.

under 1,000 in population grew. In fact, even the regions with the largest decreases (7 and 21) had more than 40 percent of their small towns gaining population.

The most dramatic small-town growth occurred in the South Sioux City area, where all 3 of its small towns grew; in the Lincoln area, where 10 of 11 grew; and in the Kearney area, where 8 of 9 grew. Other clusters of growing towns were Regions 5 and 6 (Fremont and West Point), Regions 9, 12, and 14 (York, Grand Island, and Beatrice), and Regions 18 and 19 (North Platte and Ogallala).

The data in the previous three tables seem to show that a large number of rather small towns are beginning to stabilize in terms of population size and in many instances have reversed the trend of previous decades and are beginning to grow. In the country as a whole, growth in small towns typically has occurred in metropolitan areas or in resort or retirement areas. In Nebraska, this trend is true around South Sioux City and Lincoln, but all four of the small towns in the Omaha area lost population. Besides, the 18 small towns in these areas are too few to alter significantly the patterns discussed earlier. In fact, if the data in Table 3 are changed so that the towns in the three metropolitan regions are excluded, the percent of growing small towns remains virtually unchanged.

THE URBAN-RURAL SPLIT

A topic that has received considerable attention recently, in both the popular press and in academic publications, is whether a rural renaissance has taken place in America during the 1970s. Data from the 1980 Census have verified that there has been a shift in the growth pattern of small towns, but there has been no strong evidence to indicate that the long-term decline of rural areas relative to large cities has been reversed. To understand this phenomenon fully it is important to know whether the growth in rural areas has been in exurbia (the semirural residential area beyond the suburbs of a city) or in areas unassociated with a large city. Table 4 presents data which can be used to examine the urban-rural growth pattern in Nebraska.

Prior to looking at Table 4, several terms should be defined. First, the Census Bureau defines the urban population as all persons living in places of 2,500 or more inhabitants or in the closely settled territory, incorporated or unincorporated, which surrounds a large city (sometimes referred to as "urban fringe"). The population not classified as urban constitutes the rural population. In 1980, 63 percent of Nebraska's 1,569,825 residents were urban and 37 percent were rural. Of the urban population, 91 percent lived in places (cities) and the remainder lived in the urban fringe. Only 41 percent of the rural population, on the other hand, resided in places.

The other definition of importance is that of a Standard Metropolitan Statistical Area (SMSA). Briefly, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more. In addition, to be included, the contiguous counties must be socially and economically integrated with the central city. Nebraska contains three SMSAs (two of which are shared with Iowa). The three SMSAs and the Nebraska counties contained in each are: Omaha, NE-IA SMSA—Douglas and Sarpy counties; Lincoln, NE SMSA—Lancaster County; and Sioux City, IA-NE SMSA—Dakota County. Together these metropolitan areas accounted for 44 percent of the state's population in 1980.

Table 4, then, contains data for

(continued on page 6)

Table 4
POPULATION BY URBAN AND RURAL RESIDENCE
1950-1980

	Year				Percentage Change		
	1980	1970	1960	1950	1970-1980	1960-1970	1950-1960
Total	1,569,825	1,485,333	1,411,330	1,325,510	+5.7	+5.2	+6.5
Urban	987,859	912,598	766,053	621,905	+8.2	+19.1	+23.2
Inside places	901,587	885,288	733,595	610,547	+1.8	+20.7	+20.2
Outside places	86,272	27,310	32,458	11,358	+215.9	−15.9	+185.8
Rural	581,966	570,895	645,277	703,605	+1.9	−11.5	−8.3
Inside places	241,427	234,485	239,092	252,074	+3.0	−1.9	−5.2
Outside places	340,539	336,410	406,185	451,531	+1.2	−17.2	−10.0
Inside SMSAs	692,510	634,260	542,211	426,856	+9.2	+17.0	+27.0
Urban	634,150	588,292	481,585	372,074	+7.8	+22.2	+29.4
Inside places	547,878	560,982	449,127	360,716	−2.3	+24.9	+24.5
Outside places	86,272	27,310	32,458	11,358	+215.9	−15.9	+185.8
Rural	58,360	45,968	60,626	54,782	+27.0	−24.2	+10.7
Inside places	14,325	12,029	13,582	9,711	+19.1	−11.4	+39.9
Outside places	44,035	33,939	47,044	45,071	+29.7	−27.9	+4.4
Outside SMSAs	877,315	849,233	869,119	898,654	+3.3	−2.3	−3.3
Urban	353,709	324,306	284,468	249,831	+9.1	+14.0	+13.9
Inside places	353,709	324,306	284,468	249,831	+9.1	+14.0	+13.9
Outside places	---	---	---	---	---	---	---
Rural	523,606	524,927	584,651	648,823	−0.3	−10.2	−9.9
Inside places	227,102	222,456	225,510	242,363	+2.1	−1.4	−7.0
Outside places	296,504	302,471	359,141	406,460	−2.0	−15.8	−11.6

Source: U.S. Bureau of the Census, *PC80-1-A29, Number of Inhabitants,* and similar reports for preceding years.

Review and Outlook

Nebraska's output declined 1.5 percent February-March 1982, according to the Bureau of Business Research's net physical volume index. Nearly all sectors were down on a month-to-month comparison.

Output from the agriculture sector was down 5.3 percent on a month-to-month basis. March 1982 cash farm marketings were valued at $525.6 million. Cash farm marketings were down more than $76 million February-March 1982. When compared with one year previous, March 1982 cash farm marketings were up nearly $87 billion.

Prices received for agriculture commodities by Nebraska farmers and ranchers were up 2 percent February-March on a seasonally unadjusted basis. When adjusted for seasonal factors, prices received were up 0.4 percent. On a year-to-year basis, prices received by Nebraska marketers of agriculture commodities were down 5.4 percent. This is slightly more favorable than prices received across the United States, where on a year-to-year basis prices were down 7.3 percent. Higher livestock prices are largely responsible for the improvement in agriculture prices and, since Nebraska is a large beef-producing state, this explains why Nebraska did somewhat better than nationally.

The nonagriculture components of the economy declined 0.9 percent February-March 1982. All sectors except government recorded decreases on a month-to-month basis.

Construction output declined

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

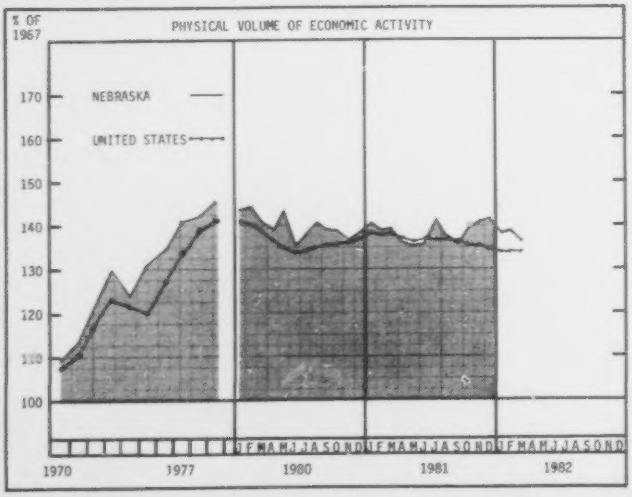
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

March 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.8	103.0	103.4	103.6
Agricultural	121.3	96.8	115.2	99.7
Nonagricultural	100.6	103.2	101.8	103.7
Construction	66.7	92.4	71.6	91.2
Manufacturing	95.7	97.2	97.7	98.5
Distributive	103.0	105.9	103.9	106.3
Government	108.8	107.4	108.6	107.5
Physical Volume	98.8	97.4	99.1	97.4
Agricultural	128.1	104.4	124.8	108.1
Nonagricultural	95.3	97.2	95.8	97.0
Construction	64.5	89.3	68.8	87.7
Manufacturing	93.4	94.0	94.7	94.4
Distributive	96.4	99.1	96.5	98.8
Government	101.5	98.1	101.5	98.0

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	365.7	358.3
Agricultural	355.0	318.8
Nonagricultural	367.1	359.6
Construction	211.0	307.8
Manufacturing	346.9	302.2
Distributive	388.6	398.0
Government	382.1	353.3
Physical Volume	136.4	134.1
Agricultural	143.7	132.3
Nonagricultural	135.2	134.1
Construction	63.2	92.2
Manufacturing	146.0	123.5
Distributive	137.3	140.6
Government	146.5	147.9

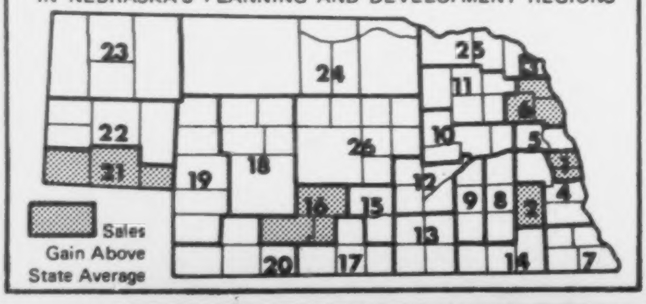


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	March 1982 as percent of March 1981	March 1982 as percent of March 1981	Year to date'82 as percent of Year to date'81
The State	95.2	94.7	92.1
1 Omaha	99.6	97.8	95.6
Bellevue	80.5		
2 Lincoln	90.4	89.6	91.7
3 So. Sioux City	96.3	94.6	88.2
4 Nebraska City	96.2	90.3	86.9
5 Fremont	85.8	87.3	87.1
Blair	97.6		
6 West Point	99.8	94.1	93.0
7 Falls City	102.7	95.1	90.3
8 Seward	88.0	90.5	87.4
9 York	93.6	89.7	87.8
10 Columbus	120.2	106.0	86.3
11 Norfolk	94.6	92.9	89.3
Wayne	102.9		
12 Grand Island	90.3	88.2	84.2
13 Hastings	88.3	90.7	86.5
14 Beatrice	91.2	91.1	86.0
Fairbury	95.3		
15 Kearney	97.7	95.7	90.7
16 Lexington	108.2	101.9	93.0
17 Holdrege	80.3	89.8	88.3
18 North Platte	83.7	83.3	82.3
19 Ogallala	94.5	98.5	89.3
20 McCook	86.4	94.7	88.3
21 Sidney	112.4	100.9	96.9
Kimball	89.2		
22 Scottsbluff/Gering	95.5	94.0	86.8
23 Alliance	96.9	94.4	89.3
Chadron	94.0		
24 O'Neill	92.4	88.4	89.6
25 Hartington	92.1	91.1	90.1
26 Broken Bow	96.8	91.7	88.4

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4) once again February-March 1982. The index in March 1982 stood at 63.2 (1967=100). This is the lowest reading during the past three years.

Output in the manufacturing sector continued to slip in March 1982. The index is down approximately 5 percent from March 1981 and nearly 15 percent below the March 1980 level. The March 1982 reading stands at 146 (1967=100) and is the lowest reading for some time. A small increase in manufacturing output was recorded in February 1982, the first increase in this index since September 1981. Manufacturing output as measured by the index has moved erratically lower since July 1981.

Output from Nebraska's distributive trade sector declined 0.6 percent February-March 1982, according to the Bureau's physical volume index for this sector. The index is about 4 percent below the March 1980 and 1981 levels for the distributive trade sector.

Government was the only sector of the index to record an increase February-March 1982, with a 0.2 percent rise. The index stood at 146.5 in March 1982 and compares with readings of 144.4 one year previous.

March 1982 retail sales were down 1.9 percent when compared with one year earlier on a dollar volume basis. When adjustments are made for price changes, retail sales were down 5.3 percent. The commodity component of the Consumer Price Index continues to reflect a slowdown in inflation, with the March 1981-March 1982 increase at 3.6 percent.

Nonmotor vehicle sales were down 1.4 percent March 1981-March 1982 on a dollar volume basis. When allowances are made for inflation, sales were down 4.8 percent. Nonvehicle retail sales totaled $689 million in March 1982, compared with $699 million March 1981 (unadjusted for price changes).

Motor vehicle sales were down 5.8 percent over the same interval on a dollar volume basis. When adjusted for price changes, motor vehicle sales were down 9.0 percent March 1981-March 1982. The actual values of motor vehicle sales were $82.7 million in March 1982 compared with $87.7 million March 1981.

Despite the general tendency toward lower retail sales, some Nebraska communities managed to record real increases (after adjustment for price changes). Retail sales at Columbus were up more than 20 percent in real terms in March 1982 compared with one year previous. Lexington recorded an increase of 8.2 percent and Sidney recorded an increase of 12.4 percent.

Strength in retail sales is also reflected in the Bureau's city business indexes. Cities recording increases above one year ago include Lexington and Sidney, where retail sales were strong. Fairbury led all cities with the largest year-to-year increase. Broken Bow also recorded a slight increase above one year ago.

D. E. P.

5. PRICE INDEXES

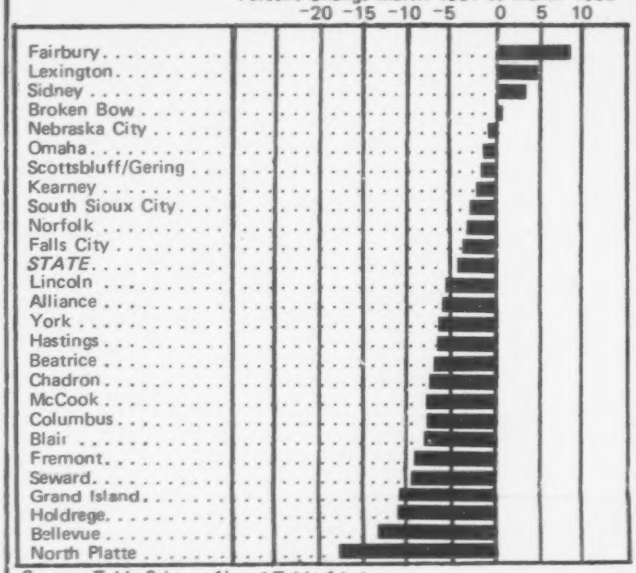
March 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices........	283.1	106.8	107.6
Commodity component	258.8	103.6	104.5
Wholesale Prices........	297.9	102.6	106.2
Agricultural Prices			
United States.........	241.0	92.7	92.2
Nebraska	247.0	94.6	92.4

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change March 1981 to March 1982



Source: Table 3 (page 4) and Table 4 below.

4. MARCH CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.2	58.0	114.7
Alliance	91.6	91.6	101.1
Beatrice	101.2	52.7	111.9
Bellevue	100.9	38.3	117.0
Blair..............	99.0	30.1	112.5
Broken Bow	99.4	151.1	112.5
Chadron	101.4	37.6	102.1
Columbus.........	97.4	49.3	120.1
Fairbury..........	98.9	841.6	112.5
Falls City	100.7	34.8	105.7
Fremont	99.4	64.0	101.9*
Grand Island.......	100.0	28.5	118.7
Hastings	103.6	59.2	214.6
Holdrege..........	97.3	71.2	108.8
Kearney	101.3	68.0	121.0
Lexington.........	100.2	125.3	97.8
Lincoln...........	103.3	59.8	109.2
McCook	92.4	159.0	106.3
Nebraska City......	96.0	161.8	107.5
Norfolk	105.8	55.7	104.9
North Platte	94.8	20.3	102.9
Omaha	100.9	63.6	117.2
Scottsbluff/Gering..	101.7	82.3	121.3
Seward	97.3	62.1	116.9
Sidney	97.7	66.2	115.0
So. Sioux City	100.8	78.6	118.8
York.............	99.4	55.8	122.0

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3) all of these areas defined above. In addition, the metropolitan and nonmetropolitan populations are further divided into their urban and rural components. The data began in 1950 because the urban-rural definitions differed prior to that time.

At first glance it appears that Nebraska's rural areas did not fare as well as its urban areas, since the rural areas grew at a 1.9 percent rate and the urban areas grew at an 8.2 percent rate. Upon closer inspection, however, a significant shift can be seen. The 1980 growth rate in urban areas is down considerably from the previous decennial rates of +19.1 percent and +23.2 percent, while the smaller rural growth rate followed two consecutive losses of 11.5 percent and 8.3 percent. Thus, even though the rural areas did not gain population in the 1970s as fast as urban areas, their relative position did not deteriorate as greatly as in previous decades.

Within rural areas, as might be expected from earlier sections, the number of inhabitants living inside places grew more rapidly than those outside places,[2] but given the size of their previous losses, the turnaround exhibited by these latter areas is much more dramatic.

Urban areas exhibited an opposite trend as the number of inhabitants within cities grew at a rate much lower than the previous decades, while the growth of the urban fringe was an astounding 215.9 percent. It is interesting to note that although the growth rate for urban areas exceeded that for rural areas, rural communities grew faster than urban communities, 3.0 percent compared to 1.8 percent.

The population data in Table 4 also are separated into totals for metropolitan and nonmetropolitan areas. Between 1970 and 1980, the population within SMSAs increased at a 9.2 percent rate, while the population outside SMSAs increased at a 3.3 percent rate. Similar to the overall urban-rural pattern, however, the metropolitan increase followed two that were significantly larger, but the nonmetropolitan increase came after two successive losses.

Within SMSAs an interesting pattern has emerged in that during the 1970s the growth occurred in the urban fringe and rural areas, while the central cities of metropolitan areas actually lost population. Caution should be used in interpreting that loss, however, since it was due entirely to losses experienced by Omaha. The fact remains, however, that rural areas within SMSAs attracted new residents during the 1970s.

Outside SMSAs, the urban population added an additional 9.1 percent between 1970 and 1980, but the rural population dropped by 0.3 percent. The rural decline was concentrated in areas outside of places, as the population residing in towns increased by 2.1 percent while the population outside of towns dropped 2.0 percent. Compared to previous decades, both rural components did relatively better in maintaining their population.

To get back to the original question of whether a rural renaissance has taken place, the evidence for Nebraska is mixed. To be sure, a turnaround appears to have occurred during the 1970s as rural areas and areas outside SMSAs have reversed decades of population losses with either growth or slowdown in the rate of decrease in population. On the other hand, urban areas grew four times faster than rural areas and metropolitan areas grew nearly three times faster than nonmetropolitan areas. Furthermore, all of the growth that did occur in rural areas happened in metropolitan counties.

J. A. D.

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[2] The rural population residing outside of places includes both farm and nonfarm residents.

NEBRASKA MANUFACTURERS DIRECTORY IS NOW AVAILABLE

The 1982-83 *Directory of Nebraska Manufacturers,* listing nearly 2,000 manufacturing firms in the state is now available from the Nebraska Department of Economic Development. The Directory is cross-referenced, and contains an alphabetical entry of all companies, a listing by community, and a product listing using Standard Industrial Classification numbers.

The price is $12.00–$12.42 with Nebraska sales tax, $12.60 in Omaha, and $12.54 in Lincoln, Bellevue, and North Platte. Mail check payable to Nebraska Department of Economic Development, along with name and address to: Department of Economic Development, Nebraska Manufacturers Directory, Box 94666, Lincoln, NE 68509.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

THE RECURRING DEBATE ON NEBRASKA'S BANKING STRUCTURE

For two years running, proposed banking legislation has been the center of considerable controversy in the Nebraska legislature. Most of this controversy has come from within the banking industry, with little or no input from the general public. This, in part, is because banking jargon and banking issues are generally unfamiliar to the public. This article will attempt to explain some of this jargon, along with some of the major issues and potential legislation which will no doubt resurface in the next session.

ORGANIZATIONAL STRUCTURE OF BANKING

The organizational structure of banking generally refers to the geographic aspect of banking institutions and is often classified into three general types: unit banking, branch banking, and group banking. Unit banking, in its strictest sense, refers to the situation where banks may conduct business from only one office. Many states which restrict banks to unit operations, however, do allow a certain number of remote-site, limited-service facilities within the home-office city. Normally, these facilities are limited to deposit and withdrawal functions, while the main office offers the full array of banking services.

In other states banks are allowed to establish several full-service branch offices apart from the main office. In states which allow branch banking, the degree of branching varies widely. Some states allow statewide branching, while others limit branching to within the home office county. For example, in California, where statewide branching is allowed, 257 banks have 4,064 branches, of which well over 2,000 are located in counties noncontiguous with the home office. On the other hand, in Kentucky, a limited branching state, 343 banks have 694 branch offices, of which all but 4 are located in the home-office county.

Multibank holding companies, often referred to as group banking, are another method of expanding the geographic market area. Although bank holding companies had made their appearance by the turn of this century, it was not a major organizational form until the late 1920s. A major impetus for its gained popularity at the time was its usefulness as a way of circumventing branching restrictions which many states were adopting. Rather than a single bank establishing several branches, a multibank holding company is a corporation which owns several subsidiary banks with each bank maintaining its own identity. Although each bank maintains its own identity, the system of banks within the holding company may be run much as a branch system if the parent corporation so desires. The 1956 Bank Holding Company Act, as amended, limits the commercial activities of corporations which acquire banks to those which are closely related to the banking business. This restriction was made to preserve the historic separation of banking from other commercial interests.

Chain banking is another organizational structure which falls under the heading of group banking. Rather than a corporation owning or controlling several subsidiary banks, chain banking describes a situation where an individual or group of individuals owns or controls several banks. Again, as in the case of multibank holding companies, the individual banks within the chain system maintain their own identity, although the system may be operated much as a branch bank.

Decisions concerning the organizational structure of banking are essentially left to the states. Prior to 1927, national banks had been denied branching privileges. The McFadden Act of 1927, along with the National Banking Act of 1933, gave national banks the same branching privileges as were accorded to state banks in their respective states. In essence, national banks were put on a competitive equality with state banks by allowing them to branch in those states which allowed branching, while preserving the state's authority in branching decisions. Like branching, the decision to legalize multibank holding companies (MBHCs) is left to the individual states.

Of course various combinations of the aforementioned structures may exist in different states. In states where both branch banking and MBHCs are allowed, holding companies may own several banks while the banks themselves may operate several branches. This picture may be further complicated by chain linkages among banks and bank holding companies.

In other states such as Nebraska, a unit banking state, the organizational structure is more straightforward. The Nebraska legislature passed legislation prohibiting branch banking in 1927 and multibank holding companies in 1963, although one MBHC was grandfathered under the 1963 law and operates today. Under current law in Nebraska, one-bank holding companies (OBHCs) are allowed (corporations which own only one bank but may engage in other commerce closely related to banking), and banks may operate two limited service auxiliary facilities within the home-office city. Because these auxiliary facilities may not perform the full range of banking functions, they are generally not considered branch banks.

Although Nebraska is referred to as a unit banking state, chain banking is quite common. The exact extent of chain banking, however, is difficult to measure since little public information on private stock ownership is available. Nevertheless, a fairly recent study of chain banking concluded that 23 percent of all Nebraska banks were members of some chain system.[1] Because this study used very stringent definitions concerning

(continued on page 2)

(continued from page 1)

what constitutes chain membership, the actual percent of chain membership is almost certain to be higher.

THE ISSUES[2]

Most arguments for and against branch banking are also common to the debate on MBHCs. Because there are few restrictions on chain banking and because of their obscure nature, little debate concerning their desirability has occurred. Nevertheless, to the extent that chains may be operated much as branch systems or MBHCs, most of the same arguments apply to chains as well.

Organizational Structure and Operating Efficiency

Proponents of branch banking or MBHCs often claim that such organizations are more efficient than strictly unit banks. Opponents either argue that this is not the case, or that other adverse consequences outweigh any claims of efficiency.

Conceptually, one might argue that branch banks and MBHCs are able to consolidate certain key production processes (for example, management and computer processing), and thereby incur lower per-unit operating costs than a comparable number of unit banks. On the other hand, beyond a certain point, as the size or geographic dispersion of a banking organization increases, the problems of organizing and coordinating the organization may increase, thereby reducing the efficiency of the organization.

The consensus of most studies has been that once some minimum office size is reached, additional operating efficiencies resulting from increased office size or different organizational structures are small. A recent *Report of the President* concluded that small unit banks of less than $15-20 million in deposits had generally lower operating costs than similar sized offices associated with branches or MBHCs. For office sizes larger than this, association with a branch system or an MBHC results in lower per-unit costs, although the advantages are generally small. It is worth pointing out, however, that various factors other than size and organizational structure are involved in determining per-unit costs of individual banks, and that operating costs may vary considerably even between banks of similar size and organizational structure.

Organizational Structure, Concentration, and Competition

The question of the effects of organizational structure on banking concentration (percent of total deposits held by a certain number of banks) and competition in banking markets has important public policy implications. Not only may increased concentration in banking markets result in higher prices and a reduced quantity and quality of banking services, but increased concentration levels at the state and national level may result in inordinate influence over political as well as other social institutions.

In Table 1, a comparison of three-firm and five-firm concentration levels (percent of deposits held by the three largest and five largest banks) for the various states shows that statewide concentration levels are indeed considerably higher in states which allow statewide branching. It is often pointed out, however, that markets in which banks effectively compete are normally much smaller than entire states, and that concentration ratios of smaller geographic areas are more appropriate indicators of market competition. Looking at Table 1 again, concentration ratios for Standard Metropolitan Statistical Areas (SMSAs) in the three groups of states are shown. SMSAs are normally judged to be good approximations of areas within which banks may actively compete. Although the differences between the grouped states are somewhat smaller, concentration ratios are still considerably higher in statewide branching states.

These concentration ratios, however, should be viewed with some caution. First, these data do not take into consideration other systematic differences between states, such as population, income, and rate of growth, which may account for some of the differences in concentration. Second, many of the branching states permitted branching prior to the 1960 Bank Merger Act which made branching by acquisition of an existing bank more difficult. It is not clear that the easing of branching restrictions at this time would result in the same increase in concentration which took place prior to 1960. The result of adopting branch banking at this time would most likely lead to an increase in statewide concentration, with the effects on SMSA or nonmetropolitan county levels being much less certain. The introduction of MBHCs as opposed to branching would likely result in higher concentration levels because of the tendency on the part of bank regulatory authorities to approve new branch charters over new bank charters in areas where the economic support for an additional bank may be marginal. In addition, because the establishment of a new bank is more costly than a new branch, MBHC expansion would be more likely to take the acquisition route rather than establishing new banks.

Concentration ratios, however, may not always be a good indication of the amount of effective competition within local banking markets. According to the theory of "potential competition,' banks which are threatened by the entry of a new bank into the local banking market may behave in a competitive manner even though they are not currently facing a competitor. Many argue that branching states which allow *de novo* entry (entry by the establishment of a new branch rather than acquiring an existing bank) have a greater degree of "potential competition" than exists in unit banking states, and that concentration ratios are therefore misleading. Studies of bank performance give some credence to this argument. Studies generally show that banks in statewide branching states pay higher interest rates on time and savings deposits, have a higher loan output, and earn lower profits than similar banks in unit banking states. At the same time, comparisons of interest rates charged on loans have produced mixed results, and service charges on checking accounts have generally

Table 1

STATE AND SMSA CONCENTRATION RATIOS FOR COMMERCIAL BANKS BY STATE BRANCHING LAWS

	No. of States[1]	State Concentration Ratios		SMSA Concentration Ratios	
		3-Firm	5-Firm	3-Firm	5-Firm
Statewide Branching	22	58.5	72.9	67.5	80.3
Limited Branching	17	28.4	37.7	62.5	76.3
Unit Banking	12	30.0	38.0	49.4	60.2

---

[1] The District of Columbia is included in these data.

Source: U.S. Department of the Treasury, *Geographic Restrictions on Commercial Banking in the United States: The Report of the President*, January, 1981, pp. 46-48.

been found to be higher in branching systems.

The long-term effects of higher statewide concentration ratios, however, should not be quickly dismissed. Although traditional market concentration studies have tended to focus on local market areas, the theory of "mutual forbearance" holds that larger firms, which have numerous local market contacts with one another, may over an extended period of time develop an unwritten code of conduct which limits price and non-price competition. In effect, banks which meet in several markets may come to recognize that vigorous competition in one market may invite retaliation in another market, and that the risk which this entails is simply not worth the gain in market share that may result. This code of "mutual forbearance," however, may be especially difficult to maintain where new banking firms are entering the market, or where market conditions are changing rapidly.

Another reason why statewide concentration ratios are important is that they give some indication of the possible influence which financial institutions may have over other social institutions. Although higher statewide concentration may not translate into less competitive behavior at the local market level, it may result in a disproportionate share of influence over bank regulatory agencies, as well as political and other social institutions.

Organizational Structure and the Availability of Banking Services

Advocates of branch banking and MBHCs often contend that such systems lead to a greater number of services at more convenient locations than would otherwise exist, especially in rural areas. Opponents argue that such services are often superficial and can be provided through correspondent system in any event.

The evidence from other states has generally shown that with the adoption of branch banking the number of banking organizations has declined, while the number of bank offices has increased on a statewide basis. Evidence for local areas, however, is more mixed. Nevertheless, the bulk of evidence would seem to suggest that in SMSAs the number of banks would remain fairly stable, whereas the number of bank offices would increase. Nonmetropolitan areas in many instances may experience both an increase in the number of banks and bank offices. As was mentioned earlier, bank regulatory authorities tend to approve new branch charters rather than new bank charters in areas which may only marginally support a new bank. Many nonmetropolitan areas may, therefore, experience the entry of a new branch competing with the existing bank(s), whereas in the absence of branching no such entry would occur. Much of this, however, is dependent on the type of branching permitted by state law (*de novo* branching and/or branching by acquisition, and statewide or limited branching). It should also be pointed out that the higher number of bank offices attributable to branching would not likely be a major benefit derived from MBHCs.

The range of services *directly* available to bank customers, especially in nonmetropolitan areas, would almost certainly increase with the adoption of branch banking or MBHCs. Larger institutions which are better able to provide a wide range of services would be allowed to establish branches or affiliates in areas previously served only by smaller institutions. These branches or affiliates normally bring with them the full range of services offered by the parent bank. The point that such services are often superficial or that the same services can be provided through the correspondent system, however, is well taken. Most studies show, for example, that the increasing loan demands in agriculture have been handled quite well through the use of participation loans with correspondent banks.[3]

Organizational Structure and the Mobility of Funds

One of the long-standing arguments against branch banking or MBHCs is that such organizations are less sensitive to rural needs or the needs of some urban neighborhoods because of their remote attachment to the community. Further, it is argued that rural and some urban affiliates or branches are used to siphon funds from these areas in order to lend to more preferred corporate customers or more profitable consumer loan customers. This results, it is often claimed, in depressed economic conditions for certain rural areas and urban neighborhoods and/or insufficient funds for small farms and businesses. Branching or MBHC supporters argue, however, that such organizations do not systematically discriminate against certain areas, but rather respond to changing loan demands wherever they may be. It is often claimed that one of the advantages of branch systems or MBHCs is that they are better able to react to changing loan demands, and channel funds to those areas where demand is the greatest.

While there has been some evidence in past studies that funds are indeed more mobile in multibank or multioffice systems, studies which attempt to determine if they are more apt to siphon funds systematically from rural areas or certain urban neighborhoods have produced mixed results. It should be pointed out, however, that rural unit banks also have the opportunity to send funds outside of the local community through the sale of excess bank reserves or by participating in loans originated by banks outside the local community. In addition, recent developments in communication, information, and computer technologies have further enhanced these opportunities, and have likely reduced the importance of organizational structure as a factor in the movement of funds.

The question of the desirability of a greater mobility of funds is certainly debatable. The traditional concept of economic efficiency, in the sense of allocating resources so as to maximize consumer satisfaction, requires that funds be allowed to flow where they earn the highest return. Nevertheless, many would argue that this concept of economic welfare is extremely narrow and that, among other things, it ignores such equity considerations as the local needs of small and beginning farms and businesses.

POTENTIAL LEGISLATION

Lesiglation to allow some form of branch banking and/or multibank holding companies in Nebraska has been introduced in the last two legislative sessions. The bill given greatest attention has been a combination MBHC/branch banking proposal. Similar legislation will almost certainly be proposed in the next legislative session.

The combination bill would have eventually allowed banks to establish up to four full-service branch banks within the corporate limits of the home-office city. In addition to branching, the same bill would have also allowed the establishment of MBHCs. Under the proposed legislation, bank holding companies could have owned or controlled up to three banks prior to January, 1984, and one additional bank each year thereafter up to a maximum of nine banks. In addition to the limit on the number of banks, an MBHC would have been prohibited from owning or controlling an additional bank if the combined

(continued on page 6)

Review and Outlook

Nebraska's net physical volume index increased 0.2% March-April 1982. The increase in the index reflects a sizable increase in April's cash farm marketing receipts and considerable improvement in April's retail sales.

The agriculture component of the net physical volume index calculated by the Bureau of Business Research was up 5.3% on a month-to-month basis. Cash farm marketing receipts in Nebraska were estimated at $647 million, up 28% on a seasonally adjusted basis, and nearly double April 1981 marketing receipts of $316.4 million. On a month-to-month basis, Nebraska's April cash farm marketing receipts were sharply higher when compared with the United States.

Prices received by Nebraska agriculture producers increased 1.2% March-April 1982. Despite this monthly gain, prices received in April 1982 were 4.9% below April 1981.

The nonagriculture segments of Nebraska's economy were down, according to the Bureau's net physical volume index. For all sectors excluding agriculture, the index was down −0.7% on a month-to-month basis. Construction recorded another decrease in April, declining 5.2%. Construction index is at its lowest point in more than three years.

Contributing to the decline in Nebraska's nonagriculture sector, the manufacturing index decreased −3.5% on a month-to-month basis. This is the largest monthly decline.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

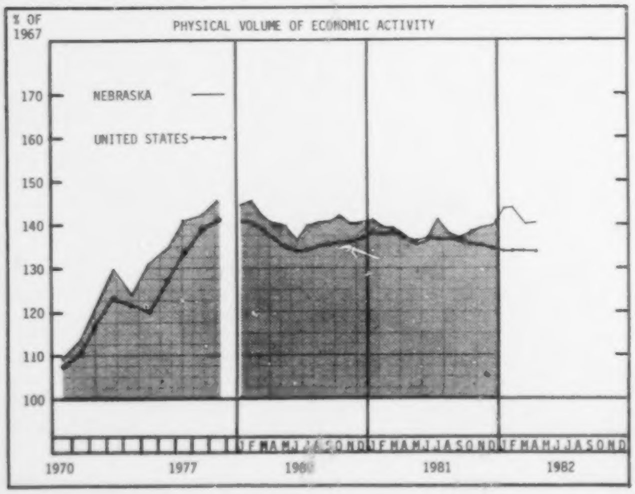
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

April 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	105.8	102.7	105.7	103.5
Agricultural	174.8	118.2	141.4	109.2
Nonagricultural	98.6	102.3	101.0	103.4
Construction	65.0	94.4	69.9	92.3
Manufacturing	88.2	93.9	95.2	97.4
Distributive	102.4	105.7	103.4	106.2
Government	108.1	107.4	109.0	107.5
Physical Volume	101.9	97.6	101.7	97.6
Agricultural	183.9	125.0	152.1	117.6
Nonagricultural	93.4	96.7	95.2	97.0
Construction	62.1	90.2	67.1	88.6
Manufacturing	86.6	92.1	92.6	93.8
Distributive	96.1	99.2	96.3	98.9
Government	101.5	98.2	102.0	98.1

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	377.4	360.0
Agricultural	450.2	387.9
Nonagricultural	366.2	359.1
Construction	201.1	310.0
Manufacturing	337.2	297.0
Distributive	390.9	399.4
Government	382.7	354.5
Physical Volume	140.4	134.3
Agricultural	180.1	158.3
Nonagricultural	134.2	133.5
Construction	59.9	92.3
Manufacturing	141.6	121.8
Distributive	137.5	140.5
Government	146.1	147.7

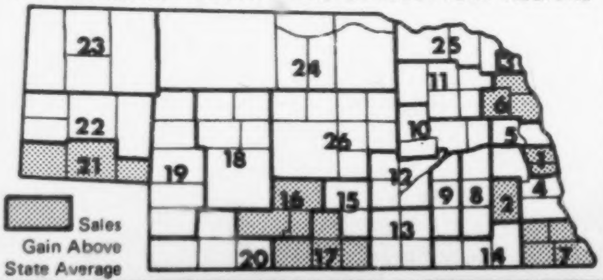


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	April 1982 as percent of April 1982	April 1982 as percent of April 1981	Year to date'82 as percent of Year to date'81
The State	105.5	104.9	95.4
1 Omaha	109.3	109.3	99.1
Bellevue	125.4		
2 Lincoln	111.0	109.5	96.3
3 So. Sioux City	97.4	96.4	90.3
4 Nebraska City	107.3	106.1	91.8
5 Fremont	106.5	107.8	92.3
Blair	113.4		
6 West Point	119.8	105.9	96.2
7 Falls City	114.8	115.6	96.5
8 Seward	112.8	108.6	92.6
9 York	121.9	106.5	92.7
10 Columbus	105.6	101.9	90.4
11 Norfolk	100.5	99.9	92.1
Wayne	93.1		
12 Grand Island	97.6	96.6	87.5
13 Hastings	83.5	90.1	87.4
14 Beatrice	101.8	105.0	90.7
Fairbury	110.3		
15 Kearney	105.6	104.3	94.4
16 Lexington	101.4	106.4	96.5
17 Holdrege	118.6	114.1	95.4
18 North Platte	106.0	101.2	87.3
19 Ogallala	90.8	88.8	89.1
20 McCook	106.2	103.7	92.3
21 Sidney	89.8	92.2	95.7
Kimball	90.4		
22 Scottsbluff/Gering	99.7	96.5	89.4
23 Alliance	81.7	85.5	88.3
Chadron	77.0		
24 O'Neill	89.5	85.0	88.2
25 Hartington	111.9	99.5	92.5
26 Broken Bow	90.2	92.9	89.6

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4)

The manufacturing component of the net physical volume index stands at 141.6 (1967 = 100). The index is down 13% from one year previous. The April 1982 reading is the lowest reading of this component in more than three years.

The distributive trade component of the index was the only nonagriculture sector recording an increase. Distributive trade advanced 0.4% March-April 1982. The index stands at 137.5 (1967 = 100), which compares with the reading of 143.1 in April 1981 and 141.6 April 1980. Strong April retail sales contributed to the increase in the distributive trade component of the index.

The government component of the Bureau's index declined -0.6% on a month-to-month basis. The government component of the index was estimated at 146.1 April 1982, and compares with a reading of 144.0 one year previous.

Nebraska's retail sales totaled $835 million in April 1982, up from $771 million in April 1981. Retail sales were 8.3% above the year-previous level, making April the first month of 1982 in which sales were higher on a dollar volume basis than in 1981.

Inflation has slowed considerably in the past 24 months. The commodity component of the consumer price index reflects this decline. It advanced 3.2% on a year-to-year basis. When unadjusted dollar volume retail sales are deflated for price increases, retail sales were up 4.9%, the first increase in real retail sales in 1982.

Nonmotor vehicle sales were stronger than motor vehicle sales. On an unadjusted basis, nonmotor vehicle sales were up 8.9%, or 5.5% when adjusted for price increases. Nonmotor vehicle sales totaled $751 million in April 1982, compared with $690 million one year ago.

Motor vehicle sales were up 2.9% on an unadjusted basis. When adjustments are made for price changes, motor vehicle sales were down 0.4%. Motor vehicle sales totaled $83.2 million in April 1982, compared with $80.9 million one year previous.

April's gain in retail sales was widely dispersed across the state. Of the 32 cities for which retail sales are reported, 20 had price-adjusted increases in retail sales. This was the first month in many months in which a majority of Nebraska cities recorded an increase in real retail sales.

Cities recording an increase in real (price-adjusted) retail sales of more than 10% include Bellevue, 25.4%; Lincoln, 11.0%; Blair, 13.4%; West Point, 19.8%; Falls City, 14.8%; Seward, 12.8%; York, 21.9%; Fairbury, 10.3%; Holdrege, 18.6%; and Hartington, 11.9%. The early 1982 increase in livestock prices was probably a contributing factor to April's relatively "good" retail sales.

The city business indexes reflect the strength in retail sales. Several cities recording gains in these indexes reported higher April 1982 retail sales.

D. E. P.

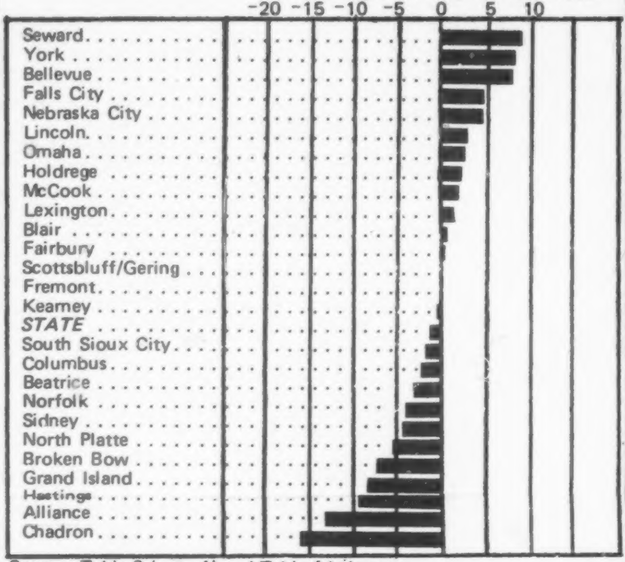
5. PRICE INDEXES

April 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	284.3	106.6	107.4
Commodity component	258.9	103.2	104.2
Wholesale Prices	297.9	101.5	105.0
Agricultural Prices			
United States	245.0	94.6	92.8
Nebraska	250.0	95.1	93.1

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change April 1981 to April 1982



Source: Table 3 (page 4) and Table 4 below.

4. APRIL CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	99.2	56.6	124.3
Alliance	92.5	68.8	108.3
Beatrice	101.0	41.0	115.2
Bellevue	100.2	38.7	133.0
Blair	97.5	39.7	118.8
Broken Bow	99.5	61.1	116.6
Chadron	101.8	28.2	122.5
Columbus	96.3	58.3	139.1
Fairbury	99.5	42.0	125.2
Falls City	99.8	61.5	103.0
Fremont	105.1	34.2	97.8*
Grand Island	95.6	32.1	153.9
Hastings	100.7	57.0	104.4
Holdrege	98.4	31.1	126.1
Kearney	99.6	60.6	125.1
Lexington	102.5	92.7	114.5
Lincoln	99.7	60.8	121.3
McCook	92.1	164.7	117.4
Nebraska City	96.2	169.9	111.5
Norfolk	97.1	53.9	111.5
North Platte	98.4	23.4	114.8
Omaha	100.2	67.6	125.7
Scottsbluff/Gering	102.4	82.4	110.2
Seward	97.0	229.6	159.0
Sidney	98.8	118.0	116.8
So. Sioux City	99.7	100.5	130.5
York	98.3	66.1	140.3

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

deposits of the banks would be greater than 10 percent of the state's total deposits in both commercial banks and S & Ls. The inclusion of S & Ls in this formula likely reflects the feeling that recent regulatory changes in the financial industry will result in more direct competition between S & Ls and commercial banks.

Another bill receiving less attention would have allowed statewide branching. This proposed legislation would have allowed (with regulatory approval) a bank to establish a branch anywhere in the state by acquiring an existing bank, and the building of a new branch only in cities or villages where no bank presently exists. Two exceptions to this were that no branch could be established in a city or village where there was only one bank or where the population was less than 2,500 persons.

The limits on the number of banks or the percent of total state deposits which could be controlled by an MBHC under the MBHC/branch banking bill is understandable, since the normal route of MBHC expansion is via the acquisition of existing banks. The reasons for this are the greater uncertainty involved with establishing a new bank versus acquiring an existing bank, and the inclination on the part of regulatory authorities to deny a *de novo* expansion in communities which may have only marginal support for a new bank. It is often pointed out that branching has a distinct advantage over MBHCs in this respect. Not only are new branches less costly than establishing an entire bank, but regulatory authorities are more prone to approve a new branch charter. Because of this, branching is normally believed to result in fewer acquisitions and a greater degree of competition than would result under MBHCs.

Regardless of one's feelings toward the branching or MBHC issue, one cannot help but notice that this particular advantage of branching over MBHCs is not present under the proposed branching legislation. For the most part, branching would be allowed only via the acquisition of existing banks. In terms of the public interest, if branching were adopted either by itself or in combination with MBHCs, it would certainly seem desirable to allow *de novo* branching.

LYNN NEJEZCHLEB

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[1] *Where Have All the Bankers Gone: A Report on the Decline of Independent Banking in Nebraska and Its Impact on Agricultural Lending* (Walthill, Nebraska: The Center for Rural Affairs, 1977).

[2] This discussion of the relevant issues, along with many of the studies referred to, relies heavily on Larry R. Mote, "The Perennial Issue: Branch Banking," *Business Conditions*, Federal Reserve Bank of Chicago, February, 1974; and U.S. Department of the Treasury, *Geographic Restrictions on Commercial Banking in the United States: The Report of the President*, January, 1981.

[3] Emanuel Melichar, "Impact of Banking Structure on Farm Lending: An Examination of Aggregate Data for States," in *Improved Funds Availability at Rural Banks: Report and Study Papers of the Committee on Rural Banking Problems* (Washington, D.C.: Board of Governors of the Federal Reserve System, June, 1975), pp. 102-111.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

NEBRASKA PERSONAL INCOME

Since 1960, the growth of personal income in Nebraska has lagged slightly behind the growth of personal income for the nation as a whole. Nebraska income grew from $2.8 billion in 1960 to $16.2 billion in 1981, a 470 percent increase, while income at the national level increased 498 percent (Table 1). In what is to follow, new and revised personal income data will be presented and analyzed over the time span covering the past two decades through 1981.

Personal income is a widely accepted measure of the economic health of a region. The major components of personal income are wages and salaries; proprietors' income; other labor income (fringe benefits, and the like), dividends and interest; rental income; and transfer payments. Taken together, the first three of the above components are often referred to as participation income, since they represent the earnings of all individuals that are producing the goods and services in a region. Adjusted for inflation, participation income is often used as a measure of real output for a region.

As a comparative measure, personal income captures differences in state economic bases. Industrial states have larger wage and salary components, states with abundant energy resources have higher levels of royalty payments, and agricultural states have greater farm income components. Personal income measures this diversity and reduces it to comparable levels.

In addition to the above applications, personal income data are used by the Bureau of Business Research to construct gross output by industrial sector for Nebraska. These output series are aggregated to form a Gross State Product series. Personal income is also the principal variable in the Bureau's annual and quarterly econometric models, which have been developed to generate forecasts of selected state economic variables.

To compensate for inflation, personal income data are expressed in 1972 dollars. In other words, all income data recorded before, during, and after the year 1972 are adjusted to reflect that year's price levels. Hence, the terms "real" or "constant dollar" income are frequently used to describe the resulting data series. Since real income takes into account the effects of inflation, it presents a more realistic view of a region's economic growth. In Table 1, personal income data in both current and constant dollars for Nebraska and the United States are displayed. These historical series cover the period from 1960 through 1981, and are the most recent data received from the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

From 1960 through 1981, real personal income in Nebraska increased 102 percent. In addition, year-to-year percentage changes in real income were computed, and the average (mean) increase over this twenty-two year time span was 3.5 percent, with an associated standard deviation of 4.6 percent.[1] For the nation as a whole, real income increased 112 percent. The year-to-year average increase was 3.7 percent, with a standard deviation of 1.8 percent. Comparatively speaking, the larger measure of dispersion associated with the annual changes in Nebraska personal income indicates a lesser degree of stability in the growth of state income. This instability is evident from the historical growth trends of real personal income for Nebraska and the United States illustrated in Figure 1 (p. 2). The growth of real Nebraska income is more erratic than that for the entire nation, and this is due primarily to the volatility of the state's

(continued on page 2)

Table 1
PERSONAL INCOME FOR NEBRASKA
AND THE UNITED STATES
1960-1981

	Nebraska Income		U.S. Income	
Year	(millions of $)	(millions of 1972 $)	(billions of $)	(billions of 1972 $)
1960	2,846	4,142	402.3	585.6
1961	2,913	4,202	417.8	602.6
1962	3,159	4,474	443.6	628.2
1963	3,265	4,556	466.2	650.5
1964	3,364	4,623	499.2	686.0
1965	3,761	5,058	540.7	727.1
1966	4,040	5,263	588.2	766.3
1967	4,238	5,360	630.0	796.9
1968	4,528	5,486	690.6	836.7
1969	5,248	6,047	754.7	869.6
1970	5,578	6,100	811.1	886.9
1971	5,974	6,222	868.4	904.5
1972	6,785	6,785	951.4	951.4
1973	8,104	7,668	1,065.2	1,007.9
1974	8,278	7,203	1,168.6	1,016.9
1975	9,310	7,415	1,265.0	1,007.5
1976	9,618	7,280	1,391.2	1,053.1
1977	10,489	7,501	1,538.0	1,099.9
1978	11,832	7,885	1,721.8	1,147.5
1979	13,672	8,400	1,943.8	1,194.2
1980	14,300	8,063	2,160.2	1,218.0
1981	16,234	8,381	2,404.1	1,241.1

Source: Bureau of Economic Analysis of the U.S. Department of Commerce and Bureau of Business Research calculations.

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[1] In this case, the standard deviation is a measure of dispersion of the annual percentage changes about the mean change over the time period under consideration (1960-1981). The greater this measure, the greater the degree of dispersion or variability of the data about the mean.

(continued from page 1)

agricultural sector. Farm income levels are greatly influenced by highly variable factors such as weather conditions, commodity prices, production expenses, and inventory changes, to name a few. Consequently, farm income can fluctuate dramatically over relatively short time spans. For example, real farm income in Nebraska declined 67 percent in 1980, and then increased 151 percent the following year. During the past two decades, farm income has accounted for as much as 16 percent of total Nebraska income. Consequently, large fluctuations in this component have a significant impact on the total. Figure 2 illustrates the growth of Nebraska farm and nonfarm income in real terms from 1970 on. The income data are indexed so that they reflect 1972 levels. It is clear from Figure 2 that farm and nonfarm income have not established similar growth patterns over the years. For nonfarm income, the long-term trend is upward, and the series is fairly stable, with no extreme fluctuations noted. For real farm income, however, the opposite is true. As indicated by Figure 2, the long-term trend (since 1970) for real farm income is downward, with extreme fluctuations occurring frequently. A fair interpretation of the graphical presentation would be that real Nebraska farm income is more volatile and, over the long run, has not maintained a positive growth pattern such as that exhibited by real nonfarm income.

Nebraska has experienced declines in real personal income during the past decade, as indicated by the data in Table 1 and illustrated in Figure 1. Real income increased each year from 1960 through 1973, and then declined sharply the next year. The 6 percent decrease recorded in 1974 was due primarily to a sharp drop in the level of real farm income (Figure 2). A decline in this same component was responsible for the decrease in real personal income that occurred in 1976. Declines in both real farm and nonfarm earnings were responsible for the latest 4 percent decrease in the level of income recorded in 1980. Although real income rebounded in 1981 (up 4 percent), the outlook for positive growth for the current year is less than optimistic. Personal income statistics for the first quarter of 1982 were recently released by BEA, and show a decline in nominal personal income for Nebraska. At annual rates, Nebraska personal income fell from $16,883 million in the fourth quarter of 1981 to $16,810 million in the first quarter of 1982, a 0.4 percent decline. In real terms, state personal income for the first quarter of 1982 declined 1.7 percent. If farm prices remain at their current low levels and unemployment remains high, Nebraska could suffer another decline in real personal income for all of 1982.

NONFARM PARTICIPATION INCOME

Nonfarm participation income represents the earnings of all individuals not exclusively involved with activities of the farm sector. In an agricultural state like Nebraska, however, there exists a strong interrelationship between the farm sector and the so-called nonfarm industries. For instance, agriculturally related activities such as food processing and farm implement production are included in the manufacturing sector. It is virtually impossible to filter out the effects of agriculture on the nonfarm sectors, and vice versa. Movement of real farm and nonfarm income over time supports this contention. Generally, when agriculture prospers, the nonfarm sectors prosper. From 1960 through 1981, real nonfarm income increased 99 percent, at an average annual change of 3.3 percent. The associated measure of dispersion for nonfarm income indicates more stability than for total real income. As illustrated in Figure 2, real nonfarm income has declined during the last two consecutive years (1980 and 1981). This downward trend could continue if the farm sector continues to suffer from low commodity prices, high production costs, and the like. Table 2 lists nonfarm participation income (earnings) in both current and real dollars for the years 1960 through 1981.

Over the years, percentage shares of nonfarm participation income by industrial sector have changed. Table 3 presents the percentage composition of nonfarm income by industry for each of the years 1960 through 1981. To some, the original data in current dollars may be of value. To convert the percentages in

Figure 1

REAL NEBRASKA PERSONAL INCOME AND REAL U.S. PERSONAL INCOME AS A PERCENT OF 1972 LEVELS

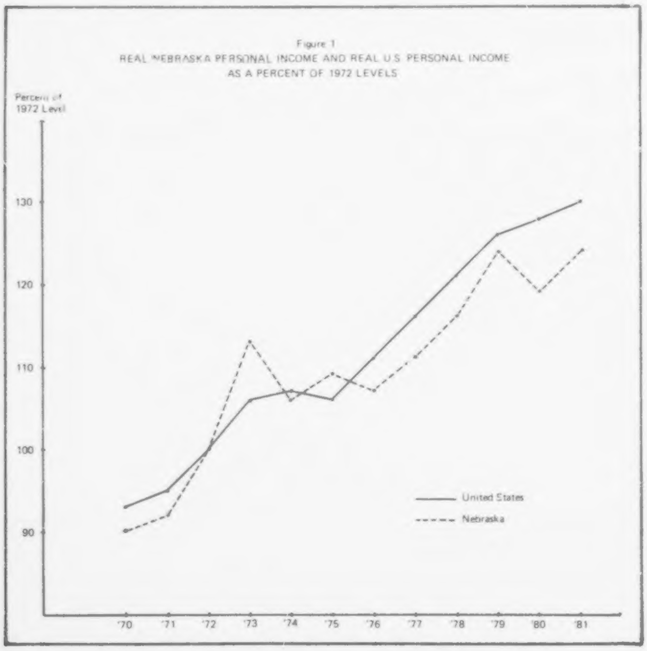


Figure 2

REAL NONFARM AND FARM INCOME FOR NEBRASKA AS A PERCENT OF 1972 LEVELS

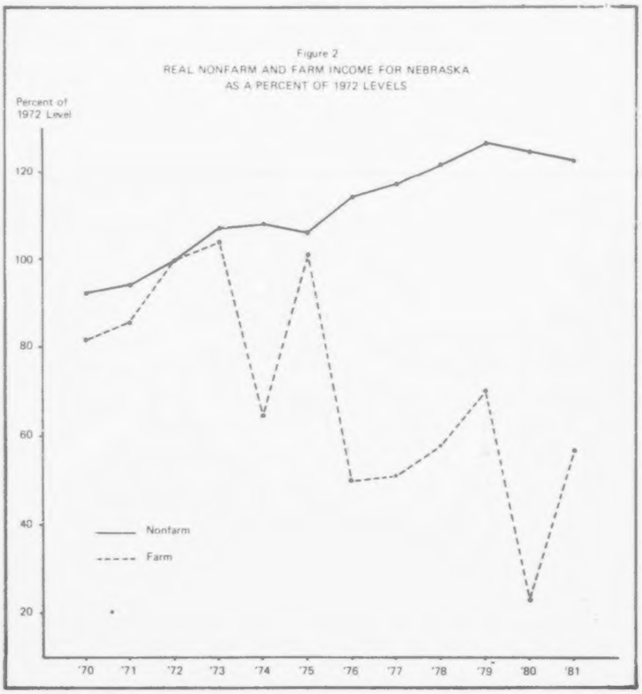


Table 2
NEBRASKA FARM AND NONFARM
PARTICIPATION INCOME
1960-1981

Year	Farm Income		Nonfarm Income	
	(millions of $)	(millions of 1972 $)	(millions of $)	(millions of 1972 $)
1960	349	505	1,995	2,748
1961	286	391	2,084	2,851
1962	400	540	2,185	2,949
1963	360	519	2,253	3,004
1964	285	427	2,380	3,136
1965	465	633	2,488	3,227
1966	542	671	2,664	3,368
1967	447	598	2,873	3,521
1968	389	501	3,132	3,698
1969	601	709	3,502	3,948
1970	547	660	3,790	4,080
1971	589	697	4,042	4,163
1972	808	808	4,448	4,448
1973	1,332	844	4,934	4,753
1974	793	528	5,462	4,795
1975	1,183	814	5,892	4,706
1976	579	405	6,640	5,049
1977	592	411	7,233	5,196
1978	820	465	8,062	5,414
1979	1,135	565	9,097	5,633
1980	356	184	9,876	5,580
1981	884	461	10,614	5,477

Source: Bureau of Economic Analysis of the U.S. Department of Commerce and Bureau of Business Research calculations.

Table 3 to the raw income data, multiply these percentages (in decimal form) by total nonfarm income in current dollars as given in Table 2. For example, construction income in current dollars for 1981 would be computed as follows:

10,614 -- total 1981 nonfarm income in millions of current dollars (Table 2)
x .0563 -- construction's 1981 percentage share of total nonfarm income (Table 3)
= 597.57 -- 1981 construction income in millions of current dollars

When rounded to the nearest whole number, the resulting figure is that reported by BEA.

The data in Table 3 show that construction, trade, and mining have declined in their shares of nonfarm participation income during the interval from 1960 through 1981. The current shares of nonfarm income for manufacturing; transportation, communications, and utilities; and government are at about the same levels as they were during the early 1960s. Of these three sectors, government's share of income has fluctuated the greatest, reaching a high of 20.95 percent in 1970 and falling as low as 17.94 percent in 1960. The two remaining nonagricultural sectors—finance, insurance, and real estate, and services—have increased their shares of nonfarm income since 1960. For the services sector, the increase amounts to more than three percentage points gained steadily over the years. This is indicative of the transition from a goods-producing economy to a services-oriented economy that has occurred in the United States since the end of World War II. The services-producing sector consists of the following industries: wholesale and retail trade; transportation,

(continued on page 6)

Table 3
PERCENTAGE COMPOSITION OF NEBRASKA NONFARM PARTICIPATION INCOME
IN CURRENT DOLLARS
1960-1981

Year	Construction	Manufacturing	Trade	Services	TCU*	FIRE**	Mining	Government	Ag., For., Fish., Other
1960	8.72	18.00	22.96	13.58	11.38	6.62	.80	17.94	NA
1961	8.69	18.09	22.60	13.77	10.89	6.72	.77	18.47	NA
1962	8.24	18.12	22.29	13.82	11.12	6.86	.64	18.90	NA
1963	8.17	17.53	22.33	13.94	10.87	6.97	.58	19.62	NA
1964	7.77	17.77	22.14	14.20	10.63	7.10	.50	19.87	NA
1965	7.96	17.52	22.19	14.39	10.65	7.07	.48	19.74	NA
1966	7.92	18.36	22.18	14.90	10.40	6.91	.45	18.88	NA
1967	7.73	19.00	21.96	15.35	9.95	6.89	.42	18.69	NA
1968	7.69	19.22	21.58	15.20	9.87	6.86	.38	19.19	NA
1969	7.97	18.96	21.22	15.48	9.48	6.57	.37	19.42	.54
1970	7.65	18.18	20.92	15.30	9.68	6.44	.37	20.95	.50
1971	7.50	17.66	20.81	15.41	9.90	6.63	.27	21.33	.49
1972	7.85	17.92	20.48	15.40	10.09	6.68	.34	20.75	.49
1973	7.90	17.90	20.82	15.46	10.30	6.47	.34	20.31	.51
1974	7.82	17.98	21.18	15.34	10.51	6.26	.57	19.81	.53
1975	7.60	16.96	21.66	15.61	10.20	6.47	.46	20.54	.51
1976	8.04	17.24	21.24	15.63	10.54	6.69	.50	19.68	.44
1977	8.10	17.18	20.89	15.48	10.70	7.02	.48	19.67	.46
1978	8.14	17.38	20.23	15.69	11.26	7.16	.36	19.31	.46
1979	7.52	17.72	20.36	15.97	11.62	7.16	.41	18.79	.46
1980	6.48	17.68	20.54	16.69	11.51	7.44	.44	18.74	.48
1981	5.63	17.71	20.71	16.86	11.72	7.47	.42	18.98	.50

*Includes Transportation, Communication, and Public Utilities.
**Includes Finance, Insurance, and Real Estate.
NA - Not available.

Source: Bureau of Economic Analysis of the U.S. Department of Commerce and Bureau of Business Research calculations.

Review and Outlook

Output fell 1.3% in May 1982 according to the Bureau of Business Research's net physical volume index. Despite the monthly decline, the index is up about 1% from year-ago levels. Economic activity was weak in the state during the third and fourth quarters of 1981, recovered modestly during the first quarter of 1982, but has retreated again during the second quarter of 1982.

The agriculture component of the state's overall output index declined 6.5% April-May 1982. Actual cash receipts from farm marketings were $675 million in May, $28 million more than in April. May 1982 cash farm marketing receipts were $245 million more than in May 1981.

Prices received by Nebraska farmers and ranchers increased 4.8% April-May. Nebraska prices received were 0.8% higher in May 1982, slightly above year-ago levels. For once, prices received by Nebraska farmers and ranchers were somewhat better than the U.S. prices. Prices received nationally increased 1.6% April-May 1982, but were 2.7% lower in May 1982 when compared with one year prior.

The nonagriculture component of the Nebraska economy declined 0.2% on a month-to-month basis. Construction and manufacturing continued to decline, while the distributive trade and government sectors recorded modest increases.

The Bureau's index of economic activity for the construction industry continues to decline. On a month-to-month basis the index was down 6.5%. The index stood

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

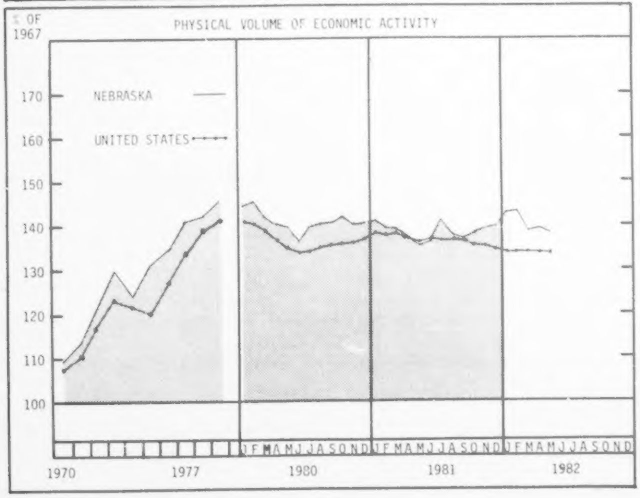
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

May 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	107.3	103.7	105.3	103.9
Agricultural	168.9	125.6	145.2	112.9
Nonagricultural	100.7	103.1	100.3	103.6
Construction	63.2	96.5	68.6	93.1
Manufacturing	85.4	92.7	93.3	96.2
Distributive	106.2	106.8	102.6	106.3
Government	110.7	110.9	110.6	111.0
Physical Volume	101.9	97.9	100.9	97.6
Agricultural	167.6	129.1	153.8	120.5
Nonagricultural	94.9	97.0	94.4	96.9
Construction	60.4	92.2	65.8	89.2
Manufacturing	83.8	91.1	90.9	93.0
Distributive	99.5	100.1	95.7	99.2
Government	101.7	98.6	101.9	98.0

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	378.7	363.3
Agricultural	435.9	394.5
Nonagricultural	369.9	362.3
Construction	187.5	303.2
Manufacturing	321.4	293.3
Distributive	398.7	404.9
Government	403.2	367.7
Physical Volume	137.9	134.0
Agricultural	166.4	158.4
Nonagricultural	133.5	133.2
Construction	56.0	90.5
Manufacturing	134.6	120.1
Distributive	138.9	141.0
Government	146.1	147.5

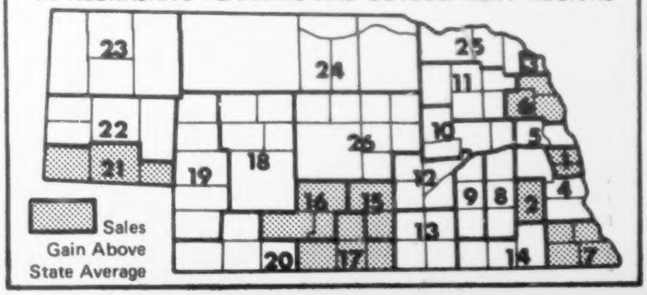


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	May 1982 as percent of May 1981	May 1982 as percent of May 1981	Year to date'82 as percent of Year to date'81
The State	91.8	93.3	95.0
1 Omaha	90.2	92.8	97.7
Bellevue	91.2		
2 Lincoln	91.1	92.9	95.6
3 So. Sioux City	93.0	93.9	91.0
4 Nebraska City	99.9	94.0	92.2
5 Fremont	89.1	93.5	92.6
Blair	94.4		
6 West Point	92.3	94.5	95.9
7 Falls City	85.7	90.4	95.2
8 Seward	83.0	90.5	92.2
9 York	101.6	95.6	93.3
10 Columbus	89.3	89.4	90.2
11 Norfolk	87.0	87.4	91.1
Wayne	83.3		
12 Grand Island	91.7	99.0	89.7
13 Hastings	91.9	96.9	89.3
14 Beatrice	90.5	92.1	91.0
Fairbury	99.9		
15 Kearney	94.1	94.9	94.5
16 Lexington	103.8	97.9	96.8
17 Holdrege	93.2	94.8	95.2
18 North Platte	92.1	92.4	88.4
19 Ogallala	96.4	88.1	88.9
20 McCook	94.6	92.5	92.3
21 Sidney	106.9	97.7	96.1
Kimball	85.2		
22 Scottsbluff/Gering	81.0	82.2	87.8
23 Alliance	81.9	87.0	88.0
Chadron	82.6		
24 O'Neill	97.8	81.0	86.6
25 Hartington	86.4	91.7	92.4
26 Broken Bow	79.8	86.6	89.0

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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at 56 in May 1982 (1967=100) and was well below the level for May 1981 of 92.6. With the exception of insignificant increases in December 1981 and January 1982, the construction index has declined month after month since peaking at 98.4 in February 1981.

Output as measured by the Bureau's index for Nebraska's manufacturing sector also declined in May. The month-to-month decline was 5.4%, one of the largest decreases during the past three years. This index stood at 134.6 in May 1982 (1967=100) compared with a value of 160.6 in May 1981 and a reading of 166.5 in May 1980. The index indicates that manufacturing sector output declined by nearly one-sixth since September 1981.

The distributive trade sector's output climbed 1.7% on a month-to-month basis. Despite this increase, this component of the index remains slightly below year-previous levels and has changed little during the past year.

The government component of the index increased 0.2% April-May 1982. This component of the index is about 2% above its one year previous level and identical with the May 1980 reading.

Nebraska retail sales declined 3.1% on a dollar volume basis in May 1982 compared with one year previous. Total retail sales were $768 million (rounded) in May 1982 compared with $592 million one year ago. When adjusted for price changes, total retail sales were down 6.7% on a year-to-year basis.

For the first time in many months, motor vehicle sales did better than nonmotor vehicle sales. Motor vehicle sales were up 12.9% on a dollar volume (unadjusted for price changes) in May 1982 compared with May 1981. Actual motor vehicle sales were $81 million in May 1982 compared with $71 million one year ago.

Nonmotor vehicle sales declined 4.7% on a year-to-year basis. Nonmotor vehicle sales were $687 million in May 1982 compared with $721 million in May 1981.

The commodity component of the Consumer Price Index continues to reflect a slowdown in the rate of inflation, increasing only 3.8% May 1981-May 1982. The overall Consumer Price Index, which measures price changes on all items, increased more rapidly over this same period, recording a 7.1% increase.

On a year-to-date basis, retail sales adjusted for price changes are down approximately 8%. Communities which have recorded real increases in retail sales include Lexington, where sales are up 3.8%; Sidney, 6.9%; and York, 1.6%. Retail sales at Nebraska City and Fairbury nearly equaled year-previous levels.

Sidney was the only Nebraska community to record a gain in its city business index. Nebraska City, York, and Seward recorded declines in their respective city business indexes, but these declines were limited to about half the average decline of -9.4%.

D. E. P.

5. PRICE INDEXES

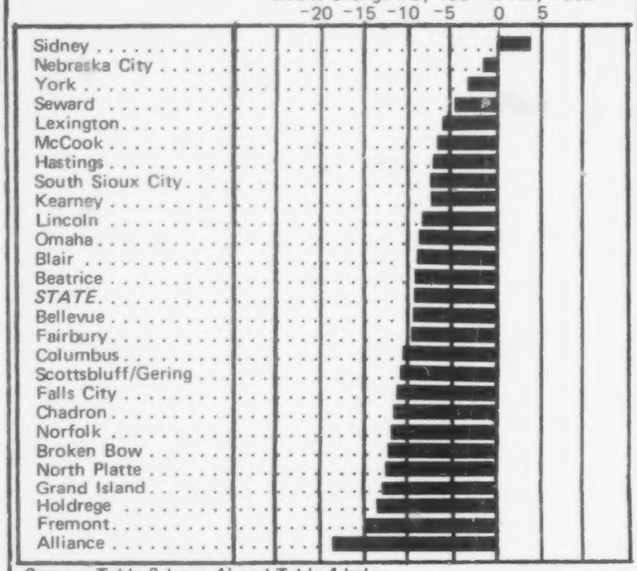
May 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	287.1	106.7	107.2
Commodity component	261.5	103.8	104.1
Wholesale Prices	298.6	101.5	104.3
Agricultural Prices			
United States	249.0	97.3	93.7
Nebraska	262.0	100.8	94.6

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change May 1981 to May 1982



Source: Table 3 (page 4) and Table 4 below.

4. MAY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	93.4	55.8	104.8
Alliance	86.1	40.0	125.8
Beatrice	96.8	46.2	114.3
Bellevue	94.2	53.2	116.9
Blair	91.7	52.9	124.6
Broken Bow	94.0	89.1	110.1
Chadron	95.0	66.6	120.7
Columbus	91.4	68.8	93.8
Fairbury	95.2	21.4	101.9
Falls City	93.0	68.5	89.5
Fremont	92.1	25.1	96.7*
Grand Island	91.9	32.9	96.3
Hastings	95.7	72.0	103.1
Holdrege	92.7	21.9	121.7
Kearney	94.3	65.0	116.7
Lexington	92.8	43.0	94.4
Lincoln	93.6	64.5	102.1
McCook	89.1	109.4	114.3
Nebraska City	91.9	146.5	98.2
Norfolk	91.9	57.7	87.8
North Platte	94.4	27.2	173.9
Omaha	94.2	64.0	96.4
Scottsbluff/Gering	95.4	98.3	130.2
Seward	92.3	356.1	93.9
Sidney	93.6	193.4	130.5
So. Sioux City	95.0	67.6	103.1
York	91.8	87.4	199.1

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

communications, and utilities; finance, insurance, and real estate; services; and government. The goods-producing sector consists of construction, mining, and manufacturing. During 1960, the goods-producing sector and the services-producing sector had shares of nonfarm income of 27.5 percent and 72.5 percent, respectively. By 1981, the share for the goods-producing sector dropped to 23.8 percent, while the services-producing sector increased its share of nonfarm income to 76.2 percent.

FARM INCOME

The final component of participation income to be examined in detail is farm income. Nebraska farm income data in both current and constant dollars are presented in Table 2. As indicated previously, the behavior of farm income is subject to highly variable factors and tends to fluctuate dramatically. An illustration of how the Bureau of Economic Analysis measures farm income is helpful in explaining the extreme fluctuations exhibited by this important component of Nebraska income.

In Table 4, the derivation of farm income by BEA is presented for the years 1978, 1979, and 1980. Farm income statistics that are usually reported by BEA comprise the final line of Table 4. From 1978 to 1979, farm income in current dollars increased 38 percent, and then declined sharply in 1980, down 69 percent. The primary reasons for the 1979 increase were a doubling of the inventory change from the level of the previous year and a slightly greater increase in cash farm marketings compared to that recorded for production expenses. The large decline in farm income for 1980 was mainly due to the combination of a negligible increase in cash receipts and a negative inventory change. Farm income is subject to frequent revisions, and these can be extreme. Often, revisions are due to an inventory change adjustment.

Compared to nonfarm income, real farm income has not fared well during the past decade, illustrated graphically in Figure 2. Production expenses have increased at a faster rate than cash receipts and other income. With the exception of one year (1974), production expenses have increased each year over the past decade at an average annual growth rate of 12.3 percent (Table 5). Cash receipts and other income have also increased over the period, but declined during three consecutive years (1974, 1975, and 1976). The average annual growth rate for cash receipts was 10.6 percent. This disparity in growth rates for cash receipts and farm production expenses is but one of the reasons why farmers are experiencing a long-term decline in real income. C. L. B.

Table 4
DERIVATION OF FARM INCOME FOR NEBRASKA
1978, 1979, AND 1980

	millions of $		
	1978	1979	1980
Total cash receipts and other income	5,623	6,901	7,025
Less: total production expenses	5,089	6,220	6,731
Realized net income	534	681	294
Plus: value of inventory change	148	299	−96
Total net income including corporate farms	682	980	198
Less: corporate farms	22	33	53
Total net farm proprietors' income	660	946	145
Plus: farm wages and perquisites	156	184	206
Plus: farm other labor income	4	5	5
Total farm labor and proprietors' income	820	1,135	356

Source: Bureau of Economic Analysis of the U.S. Department of Commerce.

Table 5
FARM PRODUCTION EXPENSES
AND CASH FARM MARKETINGS PLUS OTHER INCOME
FOR NEBRASKA
1970-1980

Year	Production Expenses (millions of $)	% Change	Cash Marketings + Other Income* (millions of $)	% Change
1970	2,216	---	2,763	---
1971	2,351	6.09	2,788	0.90
1972	2,925	24.42	3,587	28.66
1973	3,799	29.88	4,770	32.98
1974	3,475	−8.53	4,660	−2.31
1975	3,541	1.90	4,483	−3.80
1976	3,961	11.86	4,428	−1.23
1977	4,266	7.70	4,639	4.77
1978	5,089	19.29	5,623	21.21
1979	6,220	22.22	6,901	22.73
1980	6,731	8.22	7,025	1.80

*Includes other sources of income such as government payments, imputed income, and rent received.

Source: Bureau of Economic Analysis of the U.S. Department of Commerce and Bureau of Business Research calculations.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

60 Years of Service

MEDIAN FAMILY INCOME, 1979

Income data from the 1980 census are available for the state, counties, cities and villages, and unincorporated areas. The third-count census tape includes median and mean income measures for households, families, and unrelated individuals. Per capita income and various poverty income measures are also available on this third-count tape. This article focuses upon median family income.

Median family income for the state of Nebraska in 1979 was $19,144. The median income is the statistic which divides the distribution of all family incomes into two equal groups. One family group has incomes above the median while the other family group has incomes below the median. Income data are available for 1979 since the census was conducted in April of 1980. The income question was a sample question, which means that one family in five was asked to provide information on family income. In compiling data on family income, the incomes of all family members 14 years and older are summed and treated as a single amount.

The census reports what it calls "money income." Money income is the sum of wages and salaries, nonfarm net self-employment income (entrepreneurial income), farm net self-employment income, social security or railroad retirement income, public assistance or welfare income, and all other income. The income statistic represents the amount of income regularly received by families before deductions for personal income taxes, social security payments, deductions for medical care, union dues, or other items which are deducted from gross income. Income from all other sources include money incomes received from interest, dividends, net income (or loss) from property rentals, unemployment compensation benefits, workmen's compensation benefits, royalties, alimony or child support, nonservice scholarships and fellowships, and subsistence allowances for persons participating in special public training programs.

Median family income of Nebraska families increased 124 percent over the decade 1969-79. Nebraska family incomes increased faster than the national average during the 1970s. Based upon preliminary information, median family income of all United States families increased 102 percent over the decade ($9,867 to $19,908). Despite the larger relative gain, Nebraska's median family income was below the United States average (96 percent of the national average).

Median family income for Nebraska's 93 counties is summarized in Table 1 (page 2). The information is provided for 1969 and 1979 median family income and the percentage change over the decade. Prices (as measured by the Consumer Price Index) increased approximately 98 percent over the decade, which suggests that the average Nebraska family incurred a gain in real income of approximately 26 percent. For the purpose of comparison with neighboring states, median family income in Kansas in 1979 was $19,575; in Missouri, $18,746; in Iowa, $20,243; in South Dakota, $16,431; in Minnesota, $21,217; in Wyoming, $22,497; and in Colorado, $21,485.

As expected, median family incomes were higher in the metropolitan areas of the state. Twelve counties had median family incomes above the state average of $19,144. Douglas County had the top median family income of $21,629, followed closely by Sarpy at $21,569. Lancaster ranked third with a median family income of $21,383, Lincoln ranked fourth at $21,078, and Box Butte ranked fifth at $20,833. The influence of the railroads was undoubtedly important in boosting Lincoln and Box Butte counties' median family incomes. Box Butte County income ranked 36th in 1969.

Other counties with median family incomes above the state average include Washington, $20,556; Platte, $20,282; Hall, $20,144; Dodge, $19,727; Cass, $19,562; Madison, $19,454; and Dakota, $19,427. Counties with median family incomes above the state average were either associated with one of the metropolitan areas of the state or, in the case of counties such as, for example, Madison, Platte, Hall, Lincoln, and Box Butte, were major regional trade centers. The shaded areas in Map 1 (page 3) identify counties where median family income was above the state average.

Another important measure is the rate of growth of median family income. As noted above, median family income increased an average of 124 percent, 1969-79. On average, Nebraska families did somewhat better than the typical United States family in terms of income growth. At the end of the decade, family income in Nebraska was 96 percent of the U.S. average.

Data in Table 1 also set out the county-by-county percentage change in median family income. Any increase of 98 percent or more indicates that families recorded a gain in real income. Nearly 95 percent of Nebraska's counties recorded a gain in real family income. Any county recording an increase of less than 98 percent suffered a deterioration in real family income. Counties where income failed to keep pace with inflation include Banner, Blaine, Grant, Hooker, Kimball, and Logan. These counties are relatively sparsely populated and almost entirely dependent upon agriculture income. Sparse population means that a change in the income status of only a few families can substantially impact the median. Furthermore, when dealing with agriculture-related incomes, it is always possible that 1969 or 1979 could have been an abnormally good or abnormally poor year for

(continued on page 6)

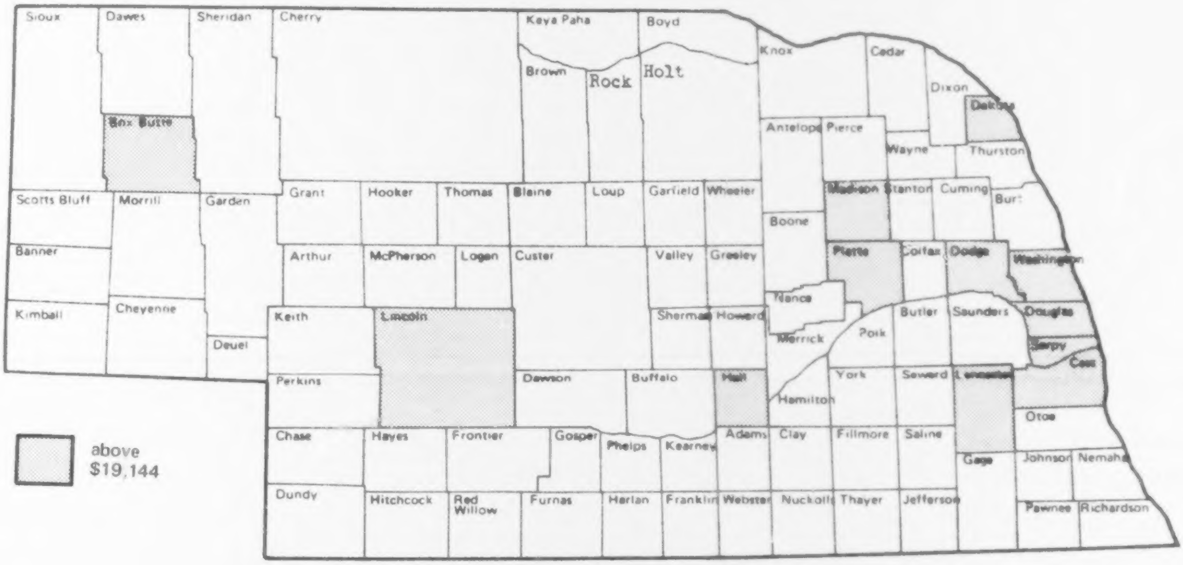
Table 1

MEDIAN FAMILY INCOME

	1979	1969	Percent Increase	Rank 1979	Rank 1969
Adams	$18,852	$8,811	114	15	9
Antelope	12,949	6,194	109	82	71
Arthur	14,125	5,225	170	69	89
Banner	12,109	8,225	47	90	18
Blaine	12,083	6,500	86	91	63
Boone	13,833	6,713	106	74	56
Box Butte	20,833	7,600	174	5	36
Boyd	10,565	4,683	126	93	92
Brown	13,232	5,814	128	79	82
Buffalo	18,332	7,756	136	22	30
Burt	15,446	7,546	105	54	37
Butler	16,613	6,489	156	38	65
Cass	19,562	7,813	150	10	28
Cedar	14,184	5,526	157	67	87
Chase	15,465	6,741	129	53	54
Cherry	16,270	7,417	119	42	40
Cheyenne	17,604	7,473	136	26	38
Clay	16,587	6,836	143	39	49
Colfax	15,905	7,088	124	45	42
Cuming	17,375	7,107	144	29	41
Custer	15,475	6,887	125	52	47
Dakota	19,426	8,557	127	12	13
Dawes	16,977	6,411	165	34	66
Dawson	18,538	8,076	130	17	22
Deuel	16,295	7,798	109	41	29
Dixon	14,525	7,012	107	62	43
Dodge	19,727	8,897	122	9	7
Douglas	21,629	10,419	108	1	1
Dundy	14,407	6,793	112	64	52
Fillmore	16,531	7,857	110	40	26
Franklin	14,053	6,020	133	71	79
Frontier	15,708	6,290	150	49	68
Furnas	13,925	6,357	119	72	67
Gage	17,050	7,631	123	33	34
Garden	15,503	6,065	156	51	75
Garfield	13,719	6,049	127	75	76
Gosper	15,203	6,810	123	55	51
Grant	14,167	7,905	79	68	25
Greeley	11,962	5,691	110	92	84
Hall	20,144	8,905	126	8	6
Hamilton	18,364	7,594	142	19	5
Harlan	14,369	6,489	121	65	64
Hayes	12,500	5,100	145	86	91
Hitchcock	14,234	6,199	130	66	70
Holt	13,910	6,034	131	73	77
Hooker	13,056	7,646	71	81	33
Howard	16,038	6,542	145	43	62
Jefferson	15,930	6,664	139	44	58
Johnson	14,733	6,719	119	60	55
Kearney	18,313	8,497	116	23	15
Keith	$18,347	$8,862	107	21	8
Keya Paha	12,542	3,956	217	84	93
Kimball	17,335	9,116	90	30	4
Knox	13,067	5,382	143	80	88
Lancaster	21,383	9,777	119	3	3
Lincoln	21,078	8,210	157	4	19
Logan	12,500	6,984	79	85	44
Loup	13,625	6,548	108	77	60
McPherson	14,479	6,033	140	63	78
Madison	19,545	8,292	136	11	16
Merrick	17,489	7,674	128	28	31
Morrill	12,752	5,923	115	83	81
Nance	13,504	6,542	106	78	61
Nemaha	16,758	8,191	105	36	20
Nuckolls	15,841	6,898	130	47	46
Otoe	17,922	8,027	123	25	24
Pawnee	12,130	5,572	118	89	85
Perkins	16,753	8,804	90	37	11
Phelps	18,961	8,505	123	13	14
Pierce	15,126	5,972	153	57	80
Platte	20,282	8,615	135	7	12
Polk	15,818	7,452	112	48	39
Red Willow	18,906	7,612	148	14	35
Richardson	14,590	6,818	114	61	50
Rock	14,844	5,709	160	59	83
Saline	18,784	7,655	145	16	32
Sarpy	21,569	10,209	111	2	2
Saunders	18,361	7,838	134	20	27
Scotts Bluff	17,076	8,072	112	31	23
Seward	18,253	8,171	123	24	21
Sheridan	17,066	6,907	147	32	45
Sherman	12,251	6,134	100	87	73
Sioux	15,575	6,167	153	50	72
Stanton	17,517	6,851	156	27	48
Thayer	15,885	6,692	137	46	57
Thomas	14,850	6,655	123	58	59
Thurston	14,095	6,074	132	70	74
Valley	13,648	6,222	119	76	69
Washington	20,556	8,808	133	6	10
Wayne	16,769	6,744	149	35	53
Webster	15,150	5,544	173	56	86
Wheeler	12,237	5,155	137	88	90
York	18,506	8,263	124	18	17
Nebraska	$19,144	$8,564	124		

Map 1

MEDIAN FAMILY INCOME ABOVE STATE AVERAGE
1979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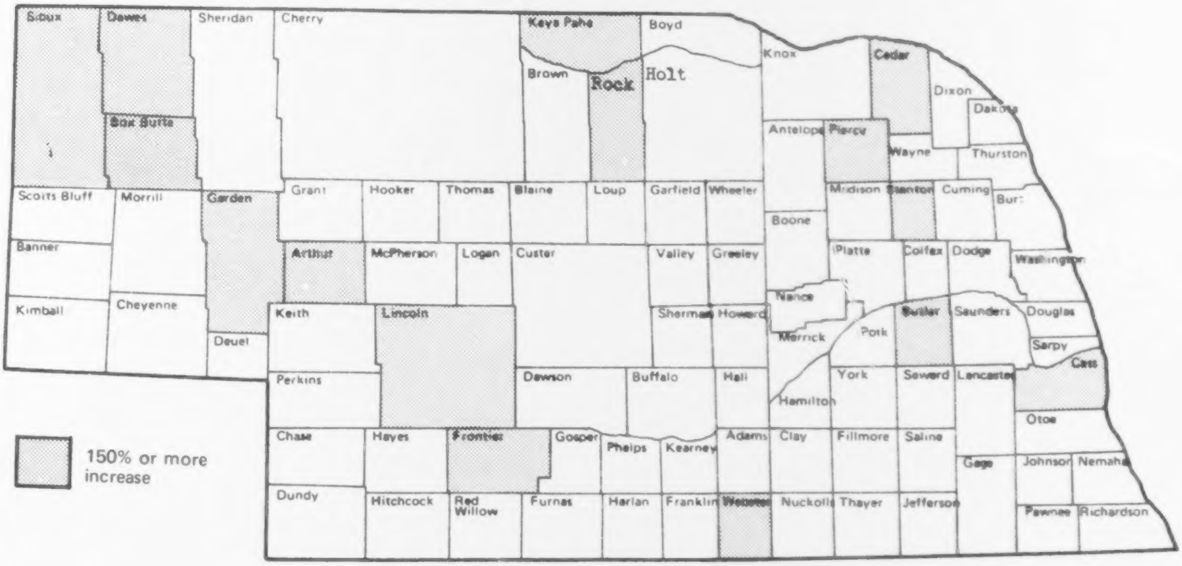
Wayne
Thurston
Scotts Bluff
Morrill
Garden
Grant
Hooker
Thomas
Blaine
Loup
Garfield
Wheeler
Madison
Stanton
Cuming
Burt
Boone
Banner
Arthur
McPherson
Logan
Custer
Valley
Greeley
Platte
Colfax
Dodge
Washington
Nance
Kimball
Cheyenne
Keith
Lincoln
Sherman
Howard
Butler
Saunders
Douglas
Merrick
Polk
Sarpy
Deuel
Cass
Perkins
Dawson
Buffalo
Hall
York
Seward
Lancaster
Hamilton
Otoe
Chase
Hayes
Frontier
Gosper
Phelps
Kearney
Adams
Clay
Fillmore
Saline
Gage
Johnson
Nemaha
Dundy
Hitchcock
Red Willow
Furnas
Harlan
Franklin
Webster
Nuckolls
Thayer
Jefferson
Pawnee
Richardson
▨ above $19,144

Map 2

INCREASES IN PERSONAL INCOME OF 150 PERCENT OR MORE
1969-79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Fillmore
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Gage
Johnson
Nemaha
Dundy
Hitchcock
Red Willow
Furnas
Harlan
Franklin
Webster
Nuckolls
Thayer
Jefferson
Pawnee
Richardson
▨ 150% or more increase

Review and Outlook

Nebraska's net physical volume increased 1.5% May-June. June was the first monthly increase in the Bureau of Business Research's net physical volume index since January 1982. Despite the increase in the overall index there are some disturbing trends in the Nebraska economy.

The increase in the state's economy was led by the agriculture sector. This component of the economy was up 18.5% on the strength of substantial increases in cash farm marketings. Cash farm marketings totaled $518 million in June. On a seasonally adjusted basis, this represents a 29% increase over May. Compared with June 1981, cash farm marketings in June 1982 were 45% above the earlier figure.

Nebraska's nonagriculture sectors declined 1.1% May-June 1982. Construction increased 2.9%, but the June 1982 reading for this component was two-thirds of the year's previous level.

Manufacturing recorded a 3.8% decline on a month-to-month basis. This index has displayed an almost constant deterioration from one year ago. The index stood at 129.7 in June 1982 (1967 = 100), approximately four-fifths of the June 1981 index value of 161.3.

The government and the distributive trade sectors of the index were little changed from the previous month. Government recorded a 0.3% increase, while the distributive trade sector recorded a 0.7% decrease. Compared with

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

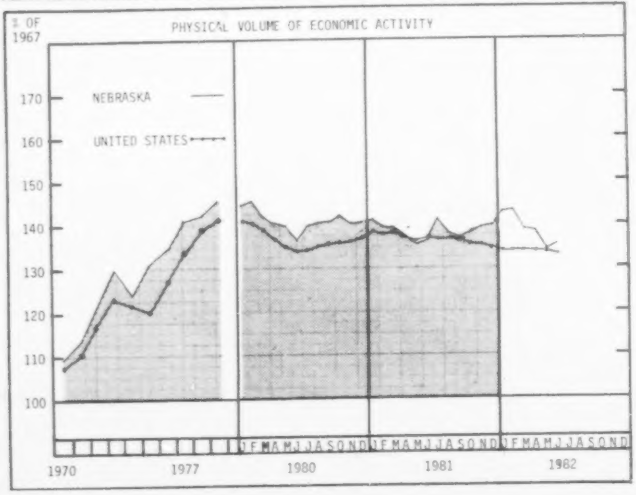
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

June 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	105.2	102.0	104.6	103.4
Agricultural	141.0	103.4	138.5	108.9
Nonagricultural	100.9	101.8	100.4	103.3
Construction	70.7	96.9	68.9	91.6
Manufacturing	82.0	91.5	91.4	95.4
Distributive	106.7	105.9	103.3	106.4
Government	111.3	107.2	110.7	110.3
Physical Volume	100.0	96.6	100.1	97.3
Agricultural	146.5	112.3	146.5	115.6
Nonagricultural	94.6	96.1	94.4	96.8
Construction	67.6	92.6	66.1	87.7
Manufacturing	80.4	89.7	89.1	92.5
Distributive	99.7	98.8	96.3	99.2
Government	102.0	99.4	101.9	98.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	375.0	363.1
Agricultural	408.5	370.5
Nonagricultural	369.7	362.9
Construction	192.9	306.5
Manufacturing	311.1	292.4
Distributive	400.6	405.9
Government	406.4	369.1
Physical Volume	135.7	132.9
Agricultural	158.9	150.0
Nonagricultural	132.1	132.4
Construction	57.6	91.5
Manufacturing	129.7	119.3
Distributive	137.9	139.7
Government	146.5	148.1

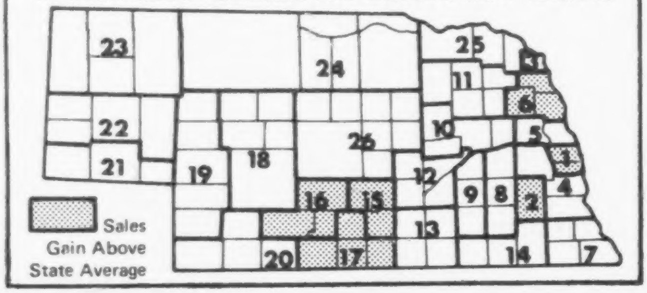


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	June 1982 as percent of June 1981	June 1982 as percent of June 1981	Year to date'82 as percent of Year to date'81
The State	90.1	92.7	94.6
1 Omaha	95.6	97.8	97.7
Bellevue	98.9		
2 Lincoln	91.0	94.3	95.3
3 So. Sioux City	84.3	87.5	90.4
4 Nebraska City	93.3	95.7	92.9
5 Fremont	92.8	98.3	93.6
Blair	102.3		
6 West Point	96.5	101.9	96.9
7 Falls City	86.7	90.9	94.2
8 Seward	94.0	96.6	93.0
9 York	100.4	97.6	94.1
10 Columbus	102.7	96.4	91.3
11 Norfolk	99.8	95.0	91.8
Wayne	86.1		
12 Grand Island	94.7	94.4	90.6
13 Hastings	88.7	93.1	90.0
14 Beatrice	97.3	99.2	92.4
Fairbury	96.1		
15 Kearney	105.0	104.2	96.3
16 Lexington	90.2	93.7	96.2
17 Holdrege	85.3	92.3	94.7
18 North Platte	98.9	99.4	90.4
19 Ogallala	101.7	91.8	89.5
20 McCook	90.9	94.6	92.7
21 Sidney	104.5	86.2	94.2
Kimball	64.6		
22 Scottsbluff/Gering	101.0	98.1	89.5
23 Alliance	87.2	91.2	88.6
Chadron	86.1		
24 O'Neill	94.2	91.2	87.5
25 Hartington	91.5	99.3	93.7
26 Broken Bow	77.6	89.8	89.2

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

year-previous levels, these two sectors have changed very little. The government sector is up 2% above June 1981 levels, while the distributive trade component is essentially unchanged from year-previous levels.

Retail sales were $806 million in June 1982, down from $831 million in June 1981—a decrease of 2.9%. Motor vehicle sales were up in June, while nonmotor vehicle sales were down. Motor vehicle sales totaled approximately $92 million for the month, up from $73 million in June 1981. Nonmotor vehicle sales were $715 million in June 1982, down from $758 in June 1981. On a price-adjusted basis, motor vehicle sales were up nearly 20%, while nonmotor vehicle sales were down 9.9%. Overall, retail sales were down 7.3% on a price-adjusted basis. Price adjustments were made using the commodity component of the Consumer Price Index. On a year-to-year basis, June 1981-June 1982, this component of the Consumer Price Index is up 4.7%.

Seward led all Nebraska communities on the city business index list with a 3.4% increase in June 1982. Seward was followed by Sidney, Scottsbluff-Gering, and Kearney. These were the only Nebraska communities to record a positive increase for the month.

Building activity in Seward seems to have been responsible for the increase in this community's index, while retail sales were up in Sidney. Kearney led all Nebraska communities with a price-adjusted 5% increase in retail sales. Sidney recorded a price-adjusted 4.5% increase in retail sales. Other communities with increases in real retail sales include Columbus, up 2.7%; Blair, up 2.3%; Ogallala, up 1.7%; Scottsbluff-Gering, up 1%; and York, up 0.4%.

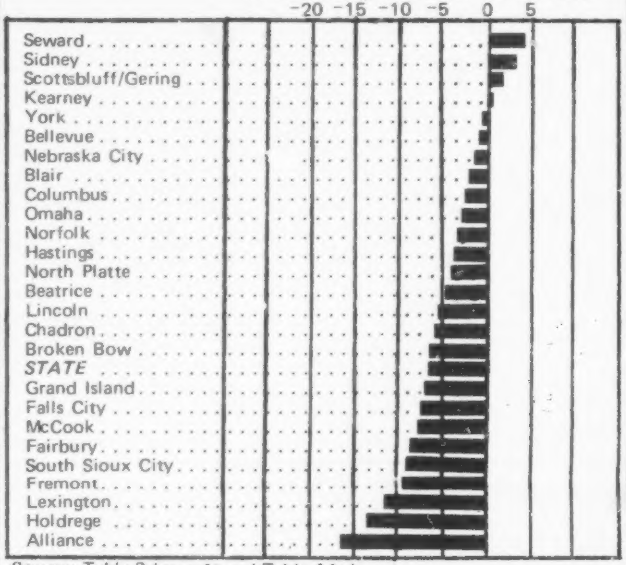
An examination of information in Table 3 indicates that real retail sales are less than 90% of year-previous levels in several Nebraska trade centers. Omaha and Lincoln, the state's two largest retailing markets, were both below year-previous levels in real terms. D. E. P.

5. PRICE INDEXES

June 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	290.6	107.1	107.2
Commodity component	265.1	104.7	104.2
Wholesale Prices	299.4	101.6	103.8
Agricultural Prices			
United States	247.0	96.5	94.2
Nebraska	257.0	96.3	94.9

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change June 1981 to June 1982



Source: Table 3 (page 4) and Table 4 below.

4. JUNE CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	99.3	62.7	83.2
Alliance	92.3	23.3	123.5
Beatrice	101.8	39.2	100.8
Bellevue	101.2	80.5	81.2
Blair	98.0	63.1	NA
Broken Bow	100.1	184.5	106.5
Chadron	100.8	107.7	92.8
Columbus	95.5	67.5	94.5
Fairbury	99.7	22.3	90.5
Falls City	101.1	66.9	82.3
Fremont	97.3	33.9	95.9*
Grand Island	97.3	45.7	83.8
Hastings	101.0	119.7	86.5
Holdrege	97.3	28.5	92.0
Kearney	99.4	70.0	92.4
Lexington	95.7	30.3	NA
Lincoln	100.9	72.6	89.1
McCook	94.7	70.0	85.9
Nebraska City	98.3	170.1	72.3
Norfolk	96.2	67.9	84.6
North Platte	101.0	46.3	91.7
Omaha	101.2	71.3	85.5
Scottsbluff/Gering	100.4	113.1	104.1
Seward	100.8	325.8	91.6
Sidney	98.3	133.9	111.4
So. Sioux City	100.7	59.1	85.8
York	98.2	96.2	84.5

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 1)

the areas in question, making comparisons of limited value.

It is important to note that these two factors, small population base and dependence upon agriculture income, may contribute to substantial variations (either up or down) in income when making comparisons. In other cases, income may be relatively unaffected by these factors and counties with these characteristics may record income changes similar to other counties. In short, income tends to be less stable in the lightly populated areas where agriculture income is important.

Counties recording an increase of 150 percent or more in personal income are illustrated by the shaded areas in Map 2 (page 3). Fourteen counties recorded decade gains in income of more than 150 percent. Keya Paha led all counties with a gain of 217 percent, but once again the small-numbers phenomenon and dependence upon agriculture income must be taken into consideration. Median family income in Keya Paha County in 1969 was placed at $3,956, the lowest in Nebraska. At $12,542 in 1979 it was still well below the state median of $19,144, and ranked 84th among the state's counties.

Of the 14 counties recording gains of 150 percent or more in personal income, only 3 had 1979 incomes above the state's average. These 3 counties were Box Butte, which reported a median family income of 108.8 percent of the state's average; Lincoln County, which was 110 percent of the state's average; and Cass County, which was 102.2 percent of the state's average.

Characteristics of a predominant number of counties—although not all of those recording large income gains—were: sparsely populated and disproportionately dependent upon income from agriculture. Either of these factors alone can produce wide swings in income. When combined, the effect can occasionally be dramatic shifts in income.

Median family incomes in 1969 and 1979 are ranked in Table 1. A close examination of the information reveals considerable movement in the relative position of some Nebraska counties. Box Butte and Lincoln counties advanced, partly in response to the railroad boom.

D. E. P.

THE BUREAU OF BUSINESS RESEARCH'S 60TH ANNIVERSARY

With the start of the academic year 1982/83, the Bureau of Business Research in the College of Business Administration celebrates its 60th anniversary. The Bureau of Business Research was established in 1922 soon after the creation of the College of Business Administration by act of the state legislature in 1919. Dean J. E. LeRossignol, first dean of the College of Business Administration, was very instrumental in the establishment of the Bureau of Business Research. The 1921 report of the Board of Regents recommended that a Bureau of Business Research be organized in the College of Business Administration. Dean LeRossignol stated: "In addition to the extention work, there is a fine opportunity for a Bureau of Business Research, along the lines of the AUBER Bureau, which has done important work. If such a Bureau were created in the University of Nebraska, it could carry on the research of great benefit to the businessmen and farmers of the state and incidentally of the entire midwest."[1]

The principal objective of the Bureau of Business Research is service to the state and region. The Bureau is responsible for:

- The development, storage, and dissemination of knowledge relevant to the business and economic conditions of the state in general and its regions, counties, and communities.
- Identification and solution of existing problems by combinations of research and education.
- Stimulation of theoretical and applied research by faculty and graduate students.
- Providing a practical learning experience for students in the areas of business and economics research.[2]

Although the Bureau has no formal teaching program for which credit is given, teaching is a very important Bureau function. Graduate and undergraduate students play an important role in the Bureau's program. In assisting staff researchers, students are exposed to data sources useful in making business decisions. Training in data sources is vitally important for the modern business person functioning in an age of electronic computers. Students with practical experience in data sources and analytical techniques gain valuable experience which they can apply during their careers.

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[1] D. Switzer, *Fifty Year History of the Bureau of Business Research.*

[2] Ibid.

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